DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
10117 PRINCESS PALM AVENUE, SUITE 120
TAMPA, FLORIDA 33610

REPLY TO
ATTENTION OF

MAY 15 2007

Tampa Regulatory Office
SAJ-2003-2336(IP-TEH)

Mr. John Sierra, Jr.
Sierra Properties
509 Guisando de Avila, Suite 200
Tampa, Florida 33613

Dear Mr. Sierra:

The U.S. Army Corps of Engineers (Corps) is pleased to enclose the Department of the Army permit, which should be available at the construction site. Work may begin immediately but the Corps must be notified of:

a. The date of commencement of the work,

b. The dates of work suspensions and resumptions of work, if suspended over a week, and

c. The date of final completion.

This information should be mailed to the Enforcement Section of the Regulatory Division of the Jacksonville District at Post Office Box 4970, Jacksonville, Florida 32232-0019. The Enforcement Section is also responsible for inspections to determine whether Permittees have strictly adhered to permit conditions.

IT IS NOT LAWFUL TO DEVIATE FROM THE APPROVED PLANS ENCLOSED.

Sincerely,

Charles A Schnepel for

David S. Hobbie
Chief, Regulatory Division

Enclosures

Copies Furnished:

Mr. John Bailey
Biological Research Associates
3910 U.S. Highway 301 North, Suite 180
Tampa, FL 33619

Ms. Linda Smith
U.S. Fish and Wildlife Service
600 Fourth Street South
St. Petersburg, FL 33701

CESAJ-RD-PE

DEPARTMENT OF THE ARMY PERMIT

Permittee: SIERRA PROPERTIES
509 GUISANDO DE AVILA, SUITE 200
TAMPA, FLORIDA 33613

Permit No: SAJ-2003-2336 (IP-TEH)

Issuing Office: U.S. Army Engineer District, Jacksonville

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The project includes the construction of a regional mall known as Cypress Creek Town Center, requiring the discharge of approximately 270,418 cubic yards of fill material into approximately 53.89 acres of jurisdictional wetlands, 9.65 acres of man-made jurisdictional surface waters, and 3.57 acres of non-jurisdictional, isolated wetlands and surface waters. In addition, temporary impacts are proposed for 0.012 acres of jurisdictional wetlands. The work described above is to be completed in accordance with the 25 pages of drawings [and 7 attachments] affixed at the end of this permit instrument.

Project Location: The project is located in the Cypress Creek watershed, bounded on the west by State Road 54, on the south by Cypress Creek, and on the east by Interstate 75, Pasco County, Florida, in Sections 22 and 27, Township 26 South, and Range 19 East.

Directions to site: From Tampa, take Interstate 275 and merge onto Interstate 75. Exit west onto State Road 56. The site is located on the north and south sides of State Road 56.

Latitude & Longitude: Latitude: 28.19294 North
Longitude: 82.39138 West

Permit Conditions

General Conditions:

1. The time limit for completing the work authorized ends on **May 31, 2012**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature and the mailing address of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to

ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. Compensatory wetland mitigation

a. On-site wetland mitigation: Within 12 months from the date of this permit, the Permittee must complete final grading and initial planting of on-site wetland creation areas and record conservation easements for all mitigation areas to accomplish the following objectives in accordance with the approved compensatory wetland mitigation plan (Attachment 3):

1) 5.34 acres forested wetland creation
2) 8.27 acres herbaceous wetland creation
3) 13.20 acres of littoral shelf vegetation within surface water management ponds
4) 2.81 acres of shallow water (non-littoral shelf) vegetation within surface water quality ponds to include all such areas within 300 feet of the top of bank of Cypress Creek.

b. Off-site wetland mitigation: Within 12 months from the date of this permit, the Permittee must complete final grading (including sod removal) and initial mulching and seeding of wetland mitigation areas, erect all required fencing, construct all berms, and record conservation easements for all mitigation areas. Initial planting of shrubs and trees within wetland mitigation areas shall be completed within 24 months. These measures will serve to accomplish the following objectives in accordance with the approved compensatory wetland mitigation plan (Attachment 3):

1) 33.8 acres forested wetland preservation
2) 4.9 acres herbaceous wetland preservation
3) 19.4 acres herbaceous wetland creation
4) 14.8 acres herbaceous wetland restoration
5) 8.0 acres forested wetland enhancement
6) 9.3 acres herbaceous wetland enhancement

2. In addition to the specific performance standards of the approved compensatory mitigation plan (Attachment 3), the Permittee must meet the following performance standards:

a. At least 80 percent cover by appropriate wetland species (i.e., FAC or wetter).

b. Less than 5 percent cover of Category I and II invasive exotic plant species, pursuant to the most current list established by the Florida Exotic Pest Plant Council at http://www.fleppc.org, and shall include the nuisance species primrose willow (*Ludwigia peruviana*), dogfennel (*Eupatorium capillifolium*), Bermudagrass (*Cynodon* spp.), Bahiagrass (*Paspalum notatum*), and cattail (*Typha* spp.).

c. Less than 20 percent mortality of planted wetland species.

3. For herbaceous mitigation areas, the Permittee must achieve the above performance standards by the end of the 5-year monitoring period, with no maintenance during the 5th year of monitoring. For forested mitigation areas, the Permittee must achieve the above performance standards by the end of the 10-year monitoring period, with no maintenance during the 10th year of monitoring. In the event that the above performance standards have not been achieved the Permittee must undertake a remediation program approved by the Corps in accordance with Special Condition 6 of this permit.

4. To show compliance with the performance standards the Permittee must complete the following:

a. Perform a time-zero monitoring event of the wetland mitigation area(s) within 60 days of completion of mitigation objectives.

b. Submit the time-zero report to the Corps within 60 days of completion of the monitoring event. The report will include a paragraph depicting baseline conditions of the mitigation site(s) prior to initiation of the mitigation objectives and a detailed plan view drawing of all created, enhanced and/or restored mitigation areas.

c. Perform semi-annual monitoring of the wetland mitigation areas for a period of no less than 3 years subsequent to completion of the mitigation objectives and annually thereafter.

d. Submit annual monitoring reports to the Corps within 60 days of completion of the monitoring event.

e. Monitor the mitigation area(s) and submit annual monitoring reports to the Corps until released in accordance with Special Condition 7 of this permit.

5. Annual monitoring reports must follow a 10-page maximum report format for assessing mitigation sites. The Permittee must submit all documentation to the Corps on 8½-inch by 11-inch paper, and include the following:

a. Project Overview (1 Page):

1) Corps Permit Number.

2) Name and contact information of Permittee and consultant.

3) Name of party responsible for conducting the monitoring and the date(s) the inspection was conducted.

4) A summary paragraph defining the purpose for the approved project, acreage and type of aquatic resources impacted, and mitigation acreage and type of aquatic resources authorized to compensate for the aquatic impacts.

5) Written description on the location and any identifiable information to locate the site perimeter(s).

6) Directions to the mitigation site (from a major highway).

7) Dates compensatory mitigation commenced and/or was completed.

8) Short statement on whether the performance standards are being met.

9) Dates of any recent corrective or maintenance activities conducted since the previous report submission.

10) Specific recommendations for any additional corrective or remedial actions.

b. Requirements (1 page): List the monitoring requirements and performance standards, as specified in the approved mitigation plan and special conditions of this permit, and evaluate whether the compensatory mitigation project site is successfully achieving the approved performance standards or trending towards success.

c. Summary Data (maximum of 4 pages): Data must be provided to substantiate the success and/or potential challenges associated with the compensatory mitigation project. Any photo documentation must be dated and clearly labeled with the direction from which the photo was taken, and be identified on the appropriate maps.

d. Maps (maximum of 3 pages): Maps must be provided to show the location of the compensatory mitigation site relative to other landscape features, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation plan.

e. Conclusions (1 page): A general statement must be included describing the conditions of the compensatory mitigation project. If performance standards are not being met, a brief explanation of the difficulties and potential remedial actions proposed by the Permittee, including a timetable, must be provided.

6. If the compensatory mitigation fails to meet the performance standards at the end of 5 years after the initiation of herbaceous mitigation activities has occurred, the

compensatory mitigation will be deemed unsuccessful. If the compensatory mitigation fails to meet the performance standards at the end of 10 years after the initiation of forested mitigation activities has occurred, the compensatory mitigation will be deemed unsuccessful. Within 60 days of notification by the Corps that the mitigation is unsuccessful, the Permittee must submit to the Corps an alternate compensatory mitigation proposal to fully offset the functional loss that occurred as a result of the project. The alternate mitigation proposal may be required to include additional mitigation to compensate for the temporal loss of wetland function associated with the unsuccessful compensatory mitigation activities. The Corps reserves the right to fully evaluate, amend, and approve or reject the alternate compensatory mitigation proposal. Within 120 days of Corps approval, the Permittee will complete the alternate compensatory mitigation proposal.

7. Your responsibility to complete the required compensatory mitigation, as set forth in Special Condition 1 of this permit will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the Corps. A mitigation area which has been released will require no further monitoring or reporting by the Permittee; however the Permittee, Successors and subsequent Transferees remain perpetually responsible to ensure that the mitigation area(s) remain in a condition appropriate to offset the authorized impacts in accordance with General Condition 2 of this permit.

8. The Permittee must provide to the Corps as-built drawings of the authorized work and an As-Built Certification Form (Attachment 6). The drawings and Certification Form must be submitted to the Corps within 60 days of completion of the authorized work, or at the expiration of the construction window of this permit, whichever occurs first. The drawings must be signed and sealed by a registered professional engineer and include the following:

a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings (8½-inch by 11-inch). The drawing

should show all "earth disturbance," including wetland impacts, water management structures, and any on-site mitigation areas.

b. List any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, the Permittee shall describe, on the As-Built Certification Form, the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or As-Built Certification Form does not constitute approval of any deviations by the U.S. Army Corps of Engineers.

c. The Department of the Army Permit number.

d. Include pre- and post-construction aerial photographs of the project site, if available.

9. The Permittee must have a legally sufficient conservation easement prepared to ensure that the areas referenced in Special Condition 1 will remain in their natural state in perpetuity. The on-site conservation easement will encompass approximately 99.070 acre(s) of wetlands and 17.607 acre(s) of uplands. The off-site conservation easement will encompass approximately 130.5 acre(s) of wetlands and 118.6 acre(s) of uplands. These natural preserve areas will not be disturbed by any dredging, filling, land clearing, agricultural activities, planting, or other construction work whatsoever. The Permittee agrees that the only future utilization of the preserved areas in question will be as a purely natural area. To show compliance with this condition the Permittee must complete the following:

a. Within 12 months from the date of this permit, submit to the Corps the draft conservation easement document with a legal description, survey, and scale drawings, of the area in question.

b. Within 30 days of Corps' approval of the draft conservation easement, record the easement in the public records of Pasco County, Florida. A certified copy of the recorded

document, plat, and verification of acceptance from the grantee must be forwarded to the Corps within 60 days of Corps' approval of the draft conservation easement.

c. Within 12 months from the date of this permit submit to the Corps a title insurance commitment with the draft conservation easement document, **IN FAVOR OF THE GRANTEE,** for the property which is being offered for preservation to show that the Permittee has clear title to the real property and can legally place it under a conservation easement. Any existing liens or encumbrances on the property must be subordinated to the conservation easement. At the time of recordation of the conservation easement, a title insurance policy must be provided to the Corps in an amount equal to the current market value of the property.

d. In the event this permit is transferred, proof of delivery of a copy of the recorded conservation easement to the subsequent Permittee or Permittees must be submitted to the Corps together with the notification of permit transfer.

10. The Grantee shall not assign its rights or obligations under this conservation easement except to another organization qualified to hold such interests under the applicable state and federal laws, including §704.06 Florida Statutes, and committed to holding this conservation easement exclusively for conservation purposes. The Corps shall be notified in writing of any intention to reassign the conservation easement to a new grantee and must approve the selection of the grantee. The new grantee must accept the assignment in writing and a copy of this acceptance delivered to the Corps. The conservation easement must then be re-recorded and indexed in the same manner as any other instrument affecting title to real property and a copy of the recorded conservation easement furnished to the Corps.

11. The Permittee will comply with the terms and conditions of the document titled "Cypress Creek Town Center Surface Water Quality Monitoring Plan" and dated February 26, 2007 (Attachment 4). All reports generated in support of this plan shall be submitted to the Corps.

12. Within 60 days of final grading of stormwater ponds "A" and "D", the Permittee shall plant a continuous hedge of native trees and/or tall shrubs between each pond and the adjacent development and/or roads.

13. That the permittee will comply with the terms and conditions of the 2004 Standard Protection Measures for the Eastern Indigo Snake, attached.

14. The Environmental Resource Permit (ERP) No. 43026931.001 and special conditions are made a part of this DA permit. For the purposes of compliance with this DA permit, where the conditions of the ERP and DA permits conflict, the DA permit shall apply.

15. A modification of ERP No. 43026931.001 does not automatically constitute a modification of this DA permit. If the permittee proposes to change any part of the authorized activity, including the mitigation, it is the permittee's responsibility to request a modification of this DA permit from this office.

16. All reports, documentation and correspondence required by the conditions of this permit must be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the

circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions: General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE)

5-15-07
(DATE)

JOHN R. SIERRA JR.
(PERMITTEE NAME-PRINTED)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Charles A Schnepel
(DISTRICT ENGINEER)
Paul L. Grosskruger
Colonel, U.S. Army
District Commander

15 May 2007
(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____

(TRANSFEREE-SIGNATURE) (DATE)

_____

(NAME-PRINTED)

_____

(ADDRESS)

_____

(CITY, STATE, AND ZIP CODE)

Attachments to Department of the Army Permit Number SAJ-2003-2336 (IP-TEH)

1. PERMIT DRAWINGS: 25 pages.

2. WATER QUALITY CERTIFICATION: Specific Conditions of the water quality permit/certification in accordance with General Condition number 5 on page 2 of this DA permit. 21 pages.

3. MITIGATION PLAN: 72 pages.

4. SURFACE WATER QUALITY MONITORING PLAN: 10 pages, dated February 26, 2007.

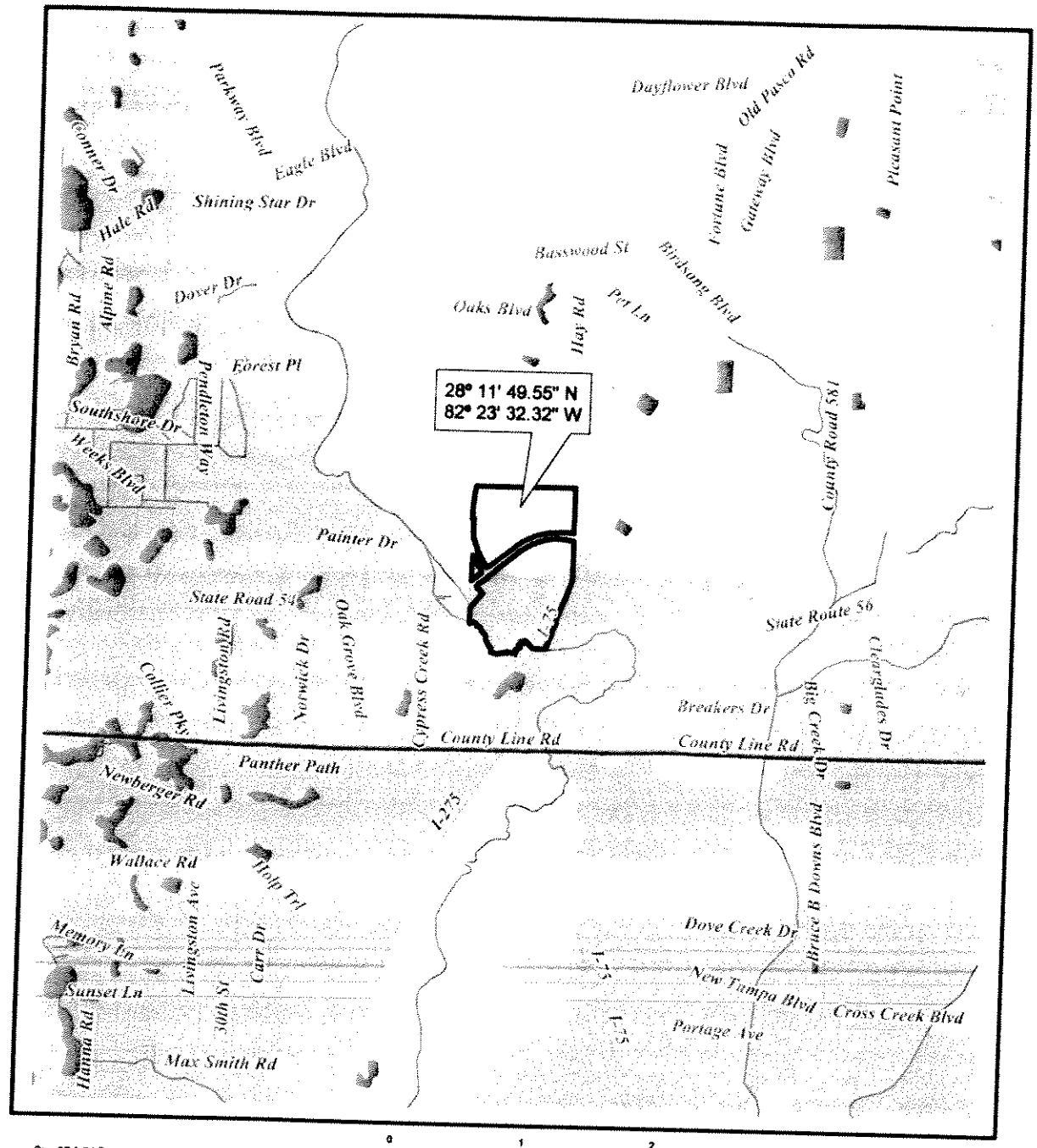
5. STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE: 1 page, dated February 12, 2004.

6. AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER FORM: 2 pages.

7. DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST FORM: 1 page.

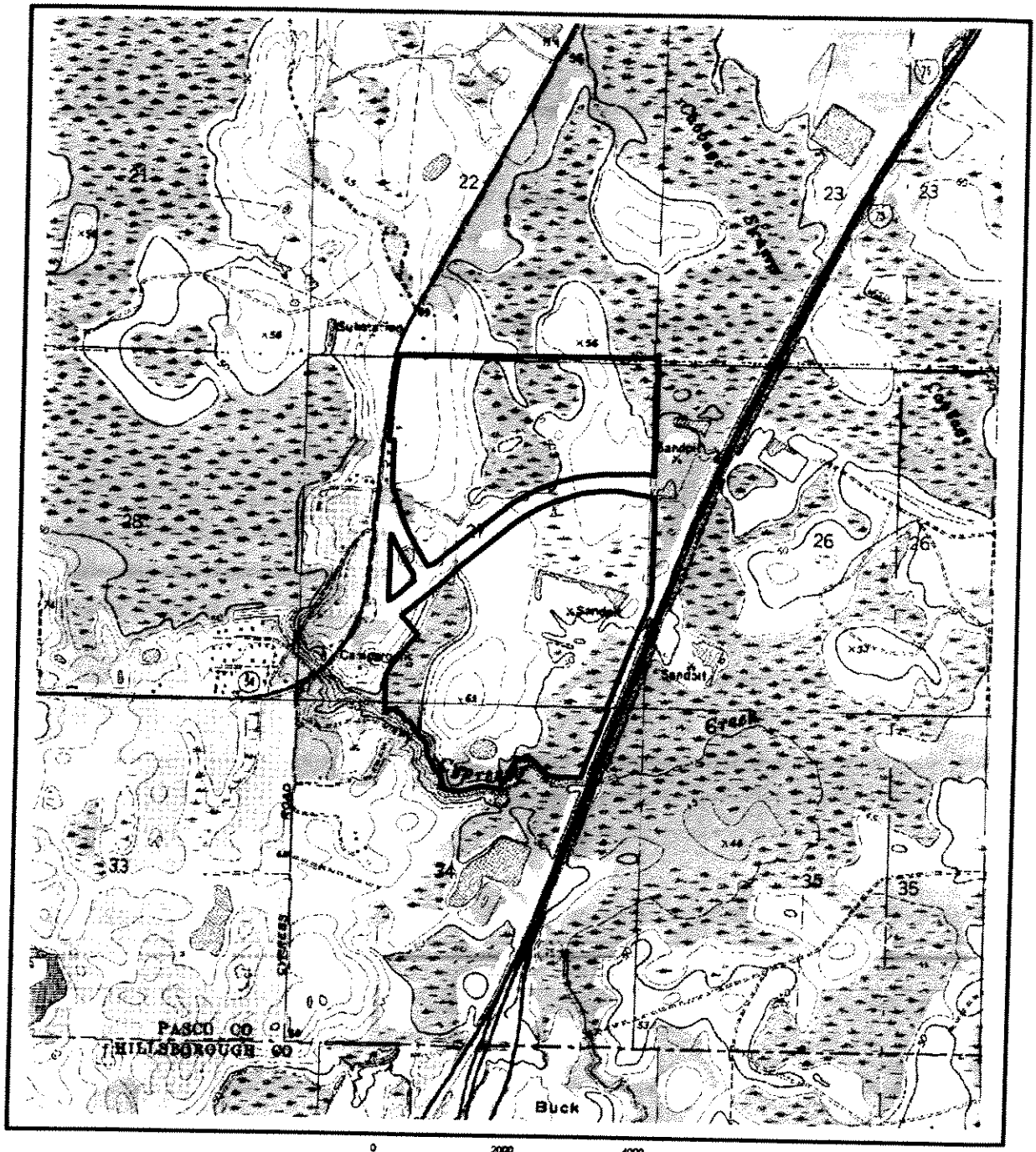
ATTACHMENT 1

PERMIT DRAWINGS



CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 1 OF 25



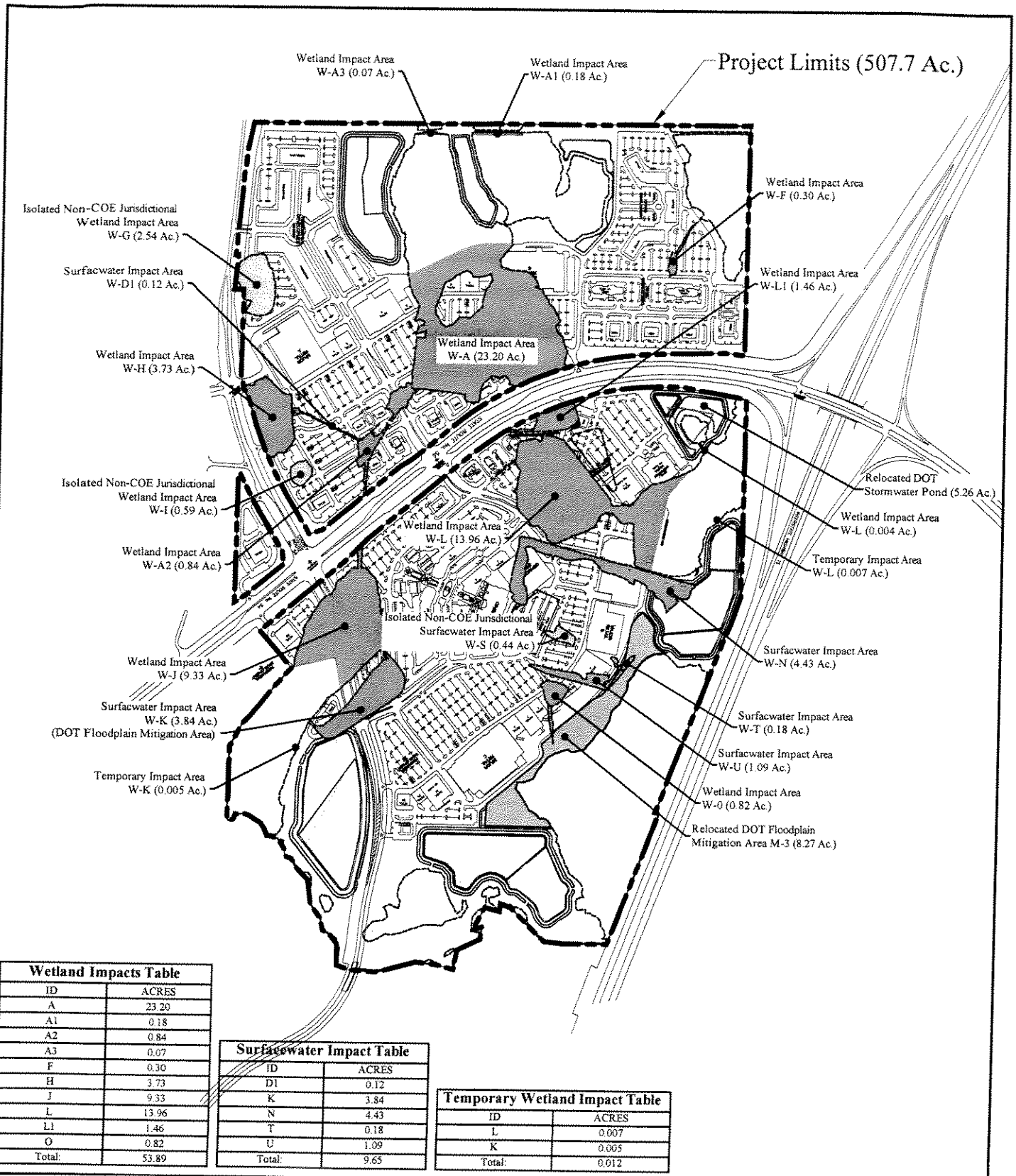
Preparation Date: 17 March, 2004	Revision Date: 14 July 2005	Project Number: 7724-001-008
Project Manager: JJB	GIS Operator: LBB	GIS QA/ QC
ArcMap Name: cypress-quad.mxd	Plot File: cypress-quad.pdf	

Figure 2
Cypress Creek Town Center
Pasco County, Florida
USGS Quad Map

Biological Research Associates
3910 US Highway 301N
Suite 180
Tampa, Florida 33619
813-664-4506 FAX 813-664-0440
www.biologicalresearch.com

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 2 OF 25



Wetland Impacts Table	
ID	ACRES
A	23.20
A1	0.18
A2	0.84
A3	0.07
F	0.30
H	3.73
J	9.33
L	13.96
L1	1.46
O	0.82
Total:	53.89

Surfacewater Impact Table	
ID	ACRES
D1	0.12
K	3.84
N	4.43
T	0.18
U	1.09
Total:	9.65

Temporary Wetland Impact Table	
ID	ACRES
L	0.007
K	0.005
Total:	0.012

1000 0 500 1000 1 inch = 1000 ft.

Figure 11

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 3 OF 25

Figure 11
Cypress Creek Town Center
Impact Location Map

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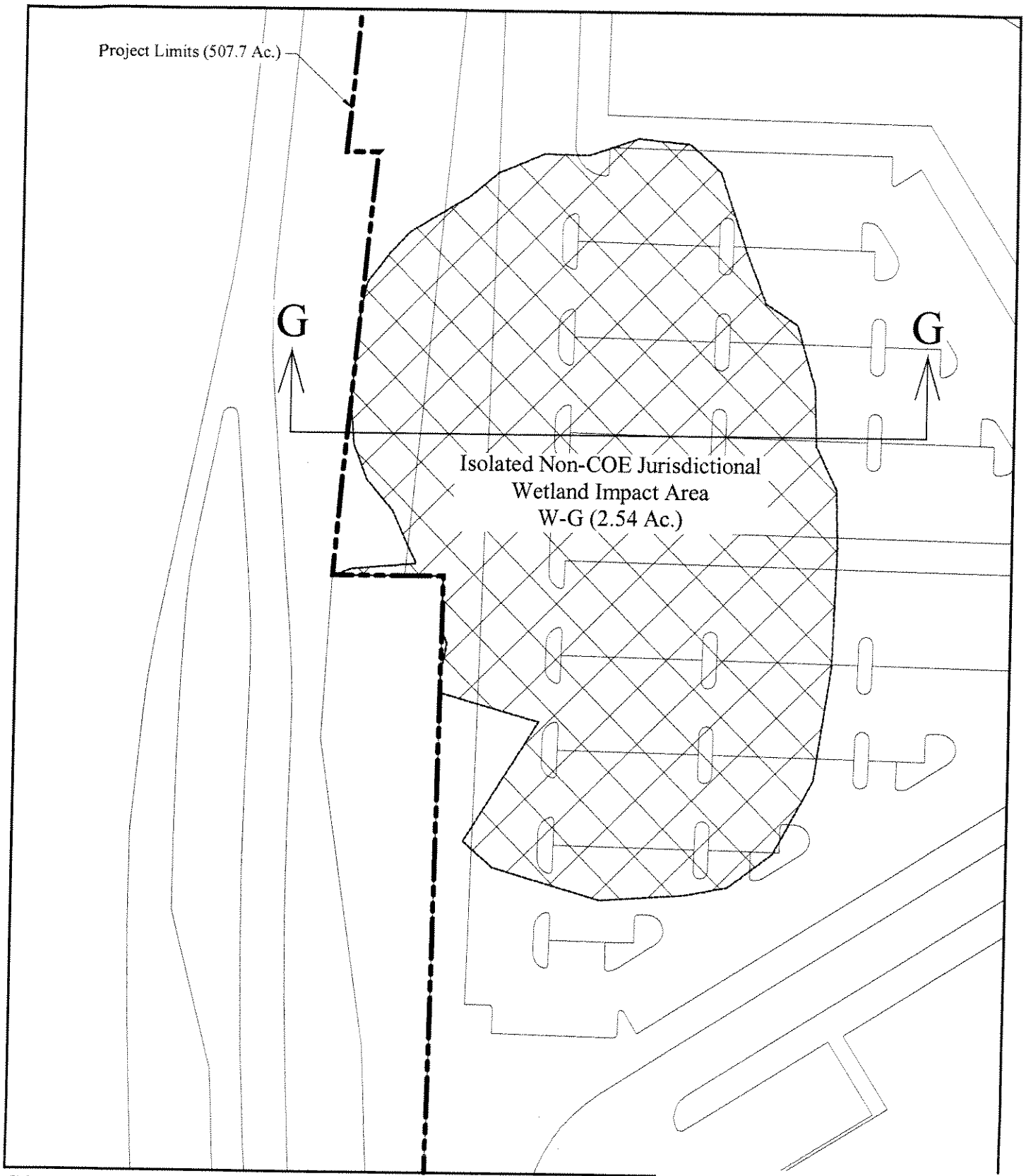

COE # SAJ20032336

80 0 40 80

Preparation Date: 05/14/07	Revision Date:
Project Manager: JJB	CAD QA/QC:
Project #: 7724-001-b08	CAD Operator: JMB

Figure 12 Cypress Creek Town Cent
Isolated Non-COE Jurisdictional
Wetland Impact G

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 4 OF 25

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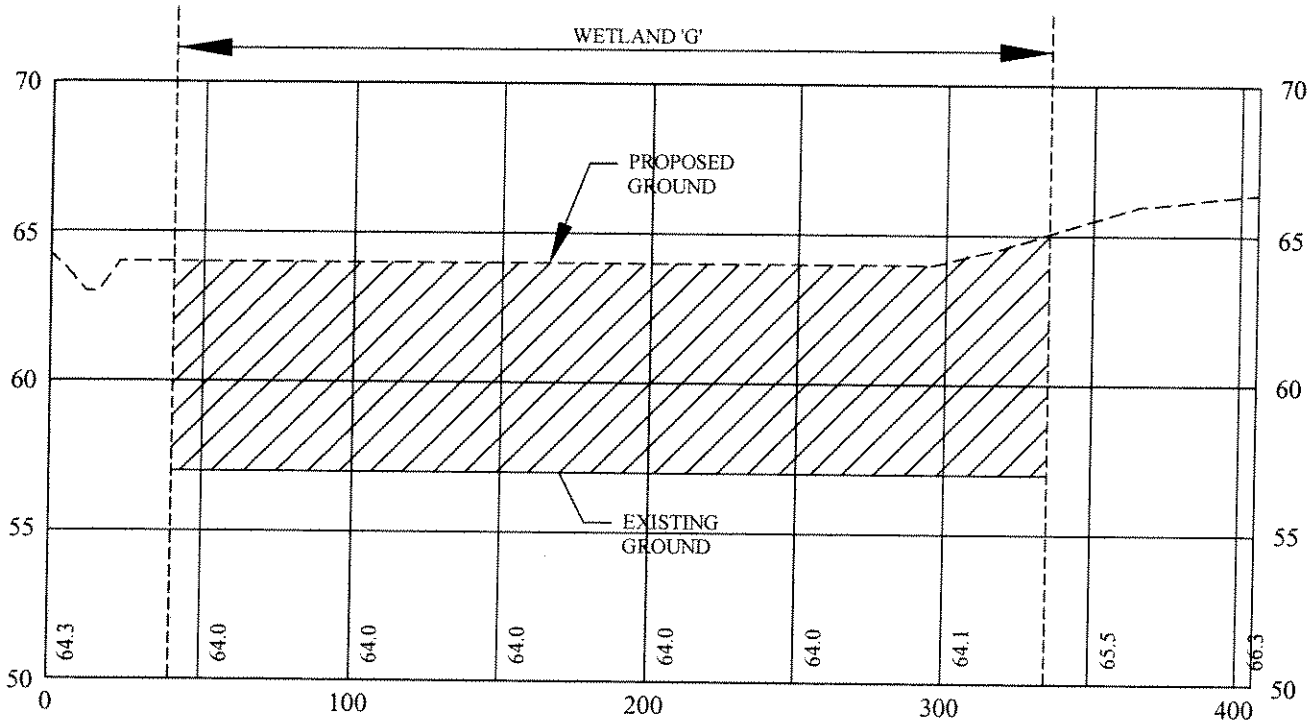

CROSS SECTION G-G

VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 5 OF 25

Figure 12a

Figure 12a
Cypress Creek Town Center
Cross Section G-G

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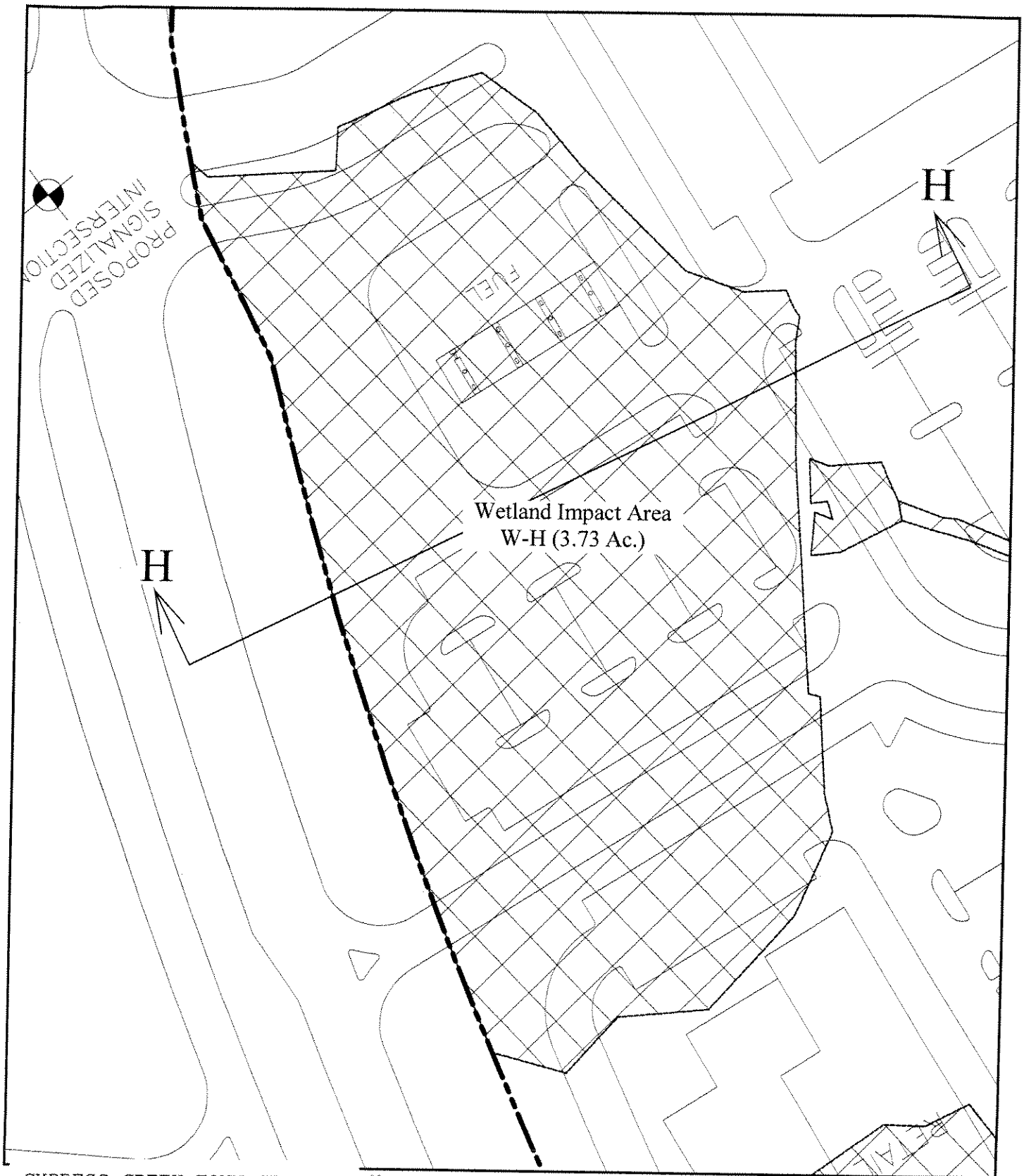

Figure 13

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 6 OF 25

Figure 13
Cypress Creek Town Center
Wetland Impact H

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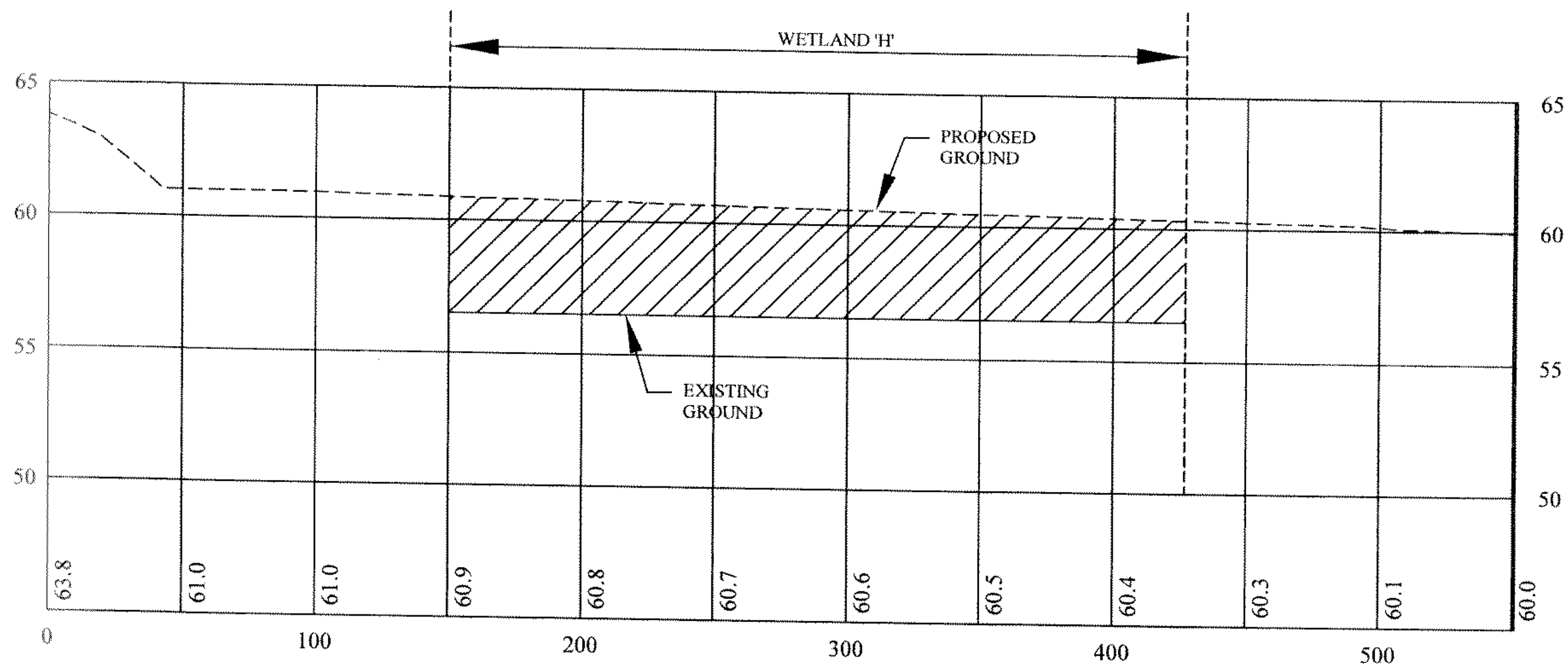

CROSS SECTION H-H
VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 7 OF 25

Figure 13a

Figure 13a
Cypress Creek Town Center
Cross Section H-H

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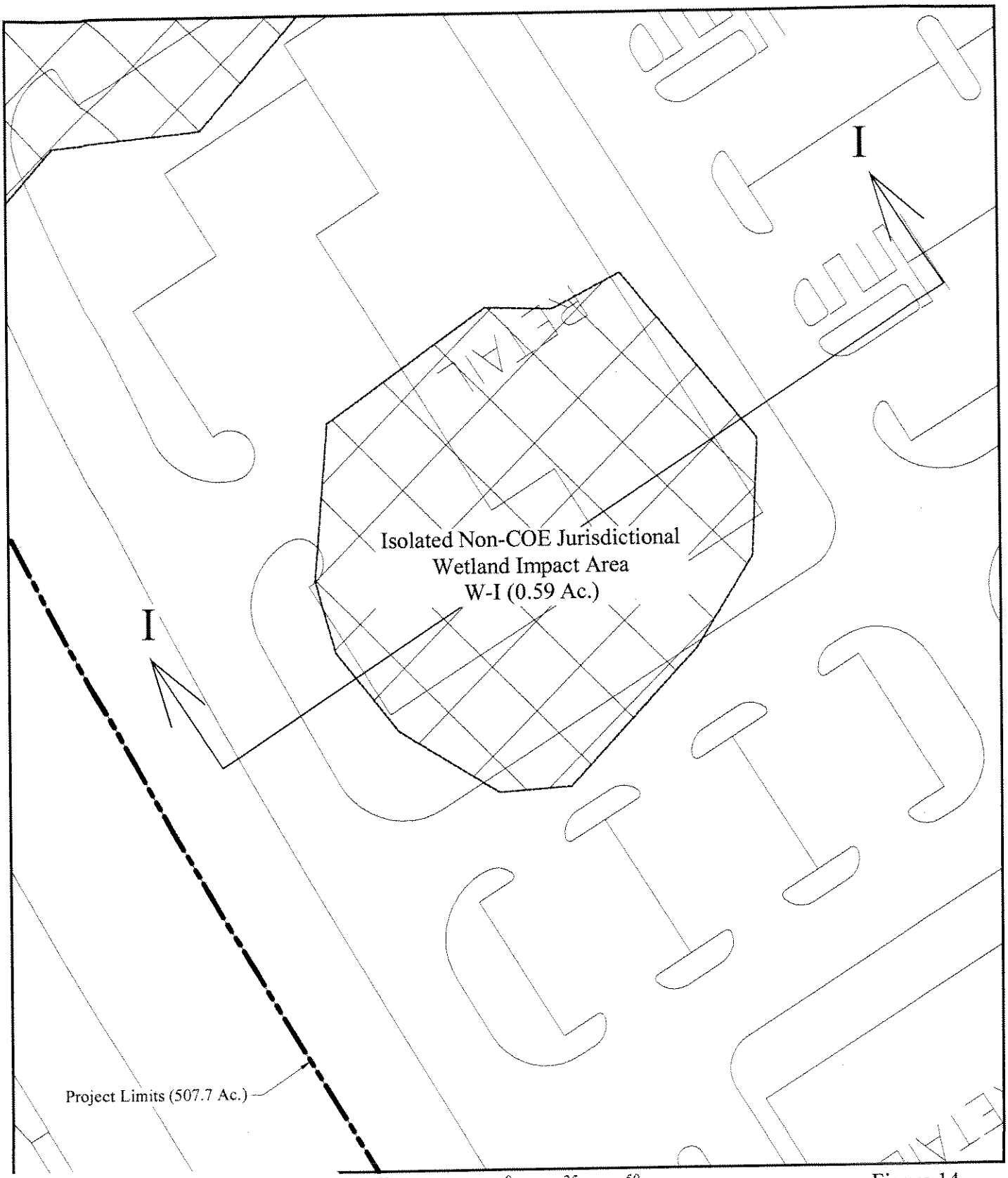

Figure 14

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 8 OF 25

Figure 14
Cypress Creek Town Center
Wetland Impact I

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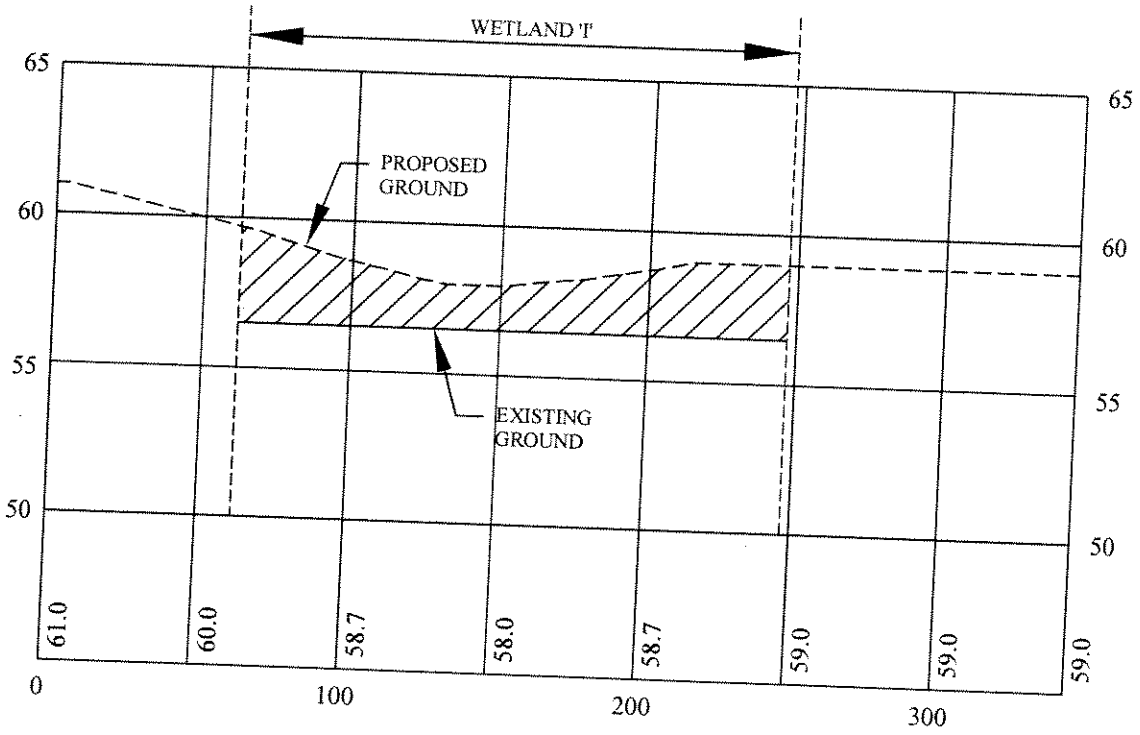

CROSS SECTION I-I
VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 9 OF 25

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Figure 14a

Figure 14a
Cypress Creek Town Center
Cross Section I-I

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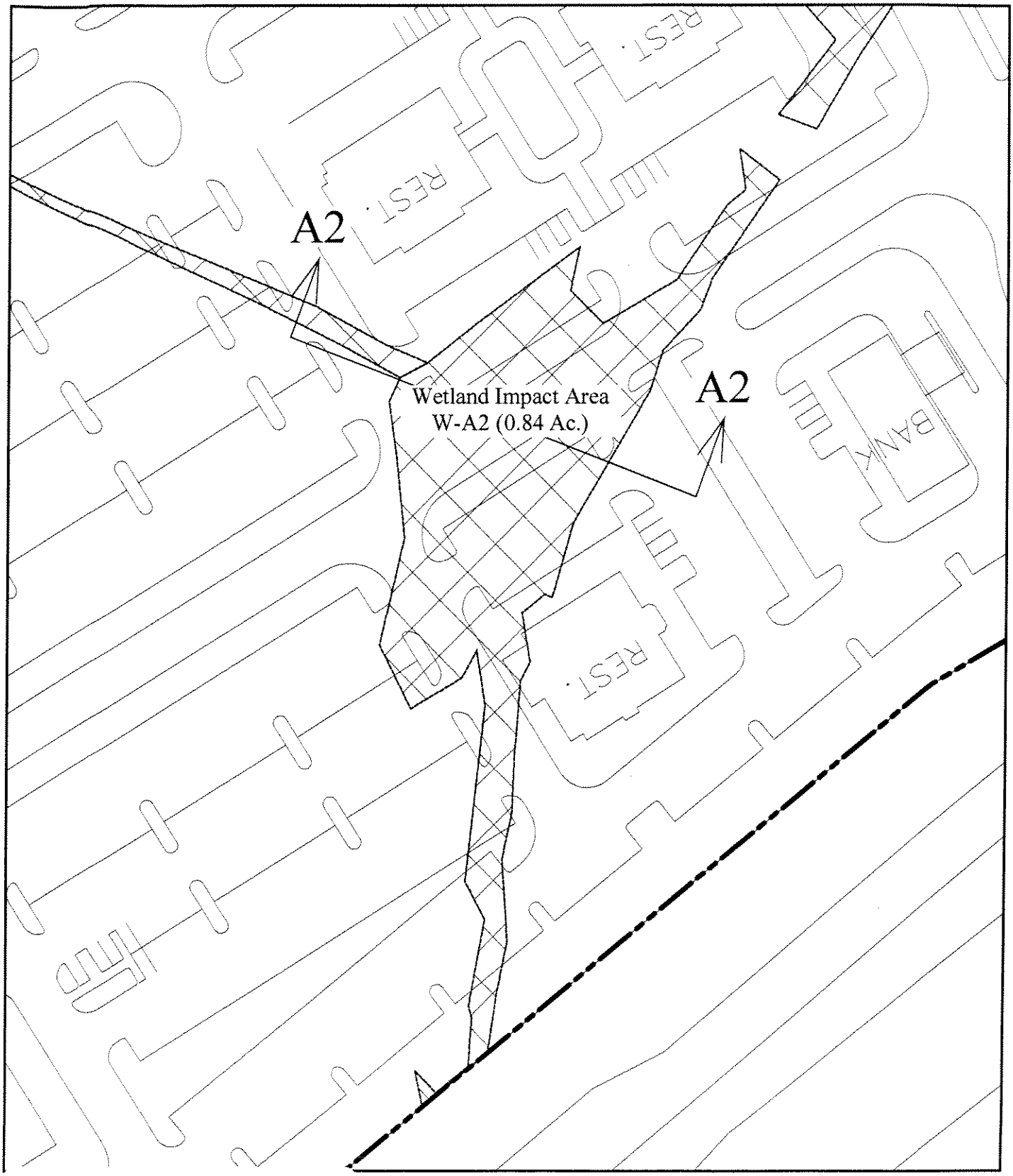

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 10 OF 25

Figure 15

Figure 15
Cypress Creek Town Center
Wetland Impact A2

Biological Research Associates
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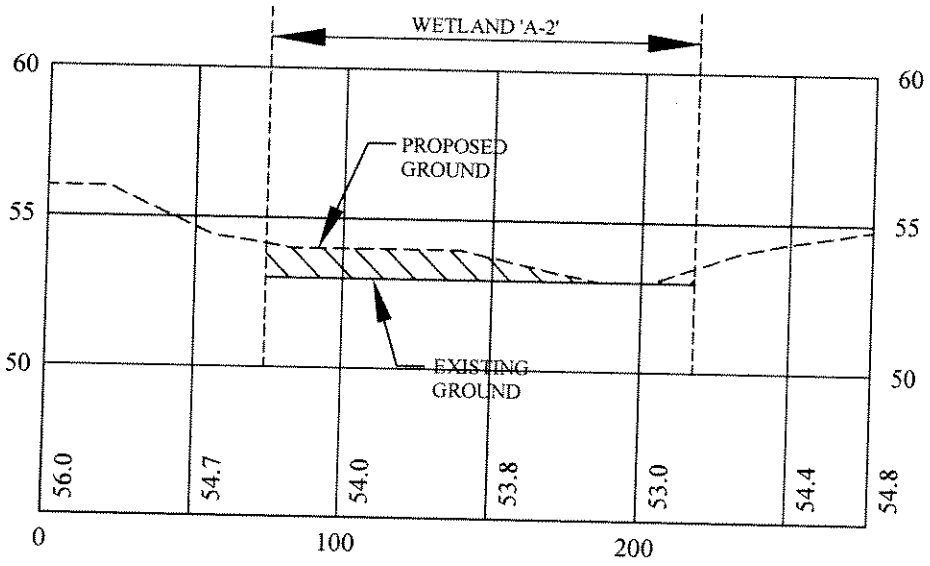

CROSS SECTION A2-A2

VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 11 OF 25

Figure 15a

Figure 15a
Cypress Creek Town Center
Cross Section A2-A2

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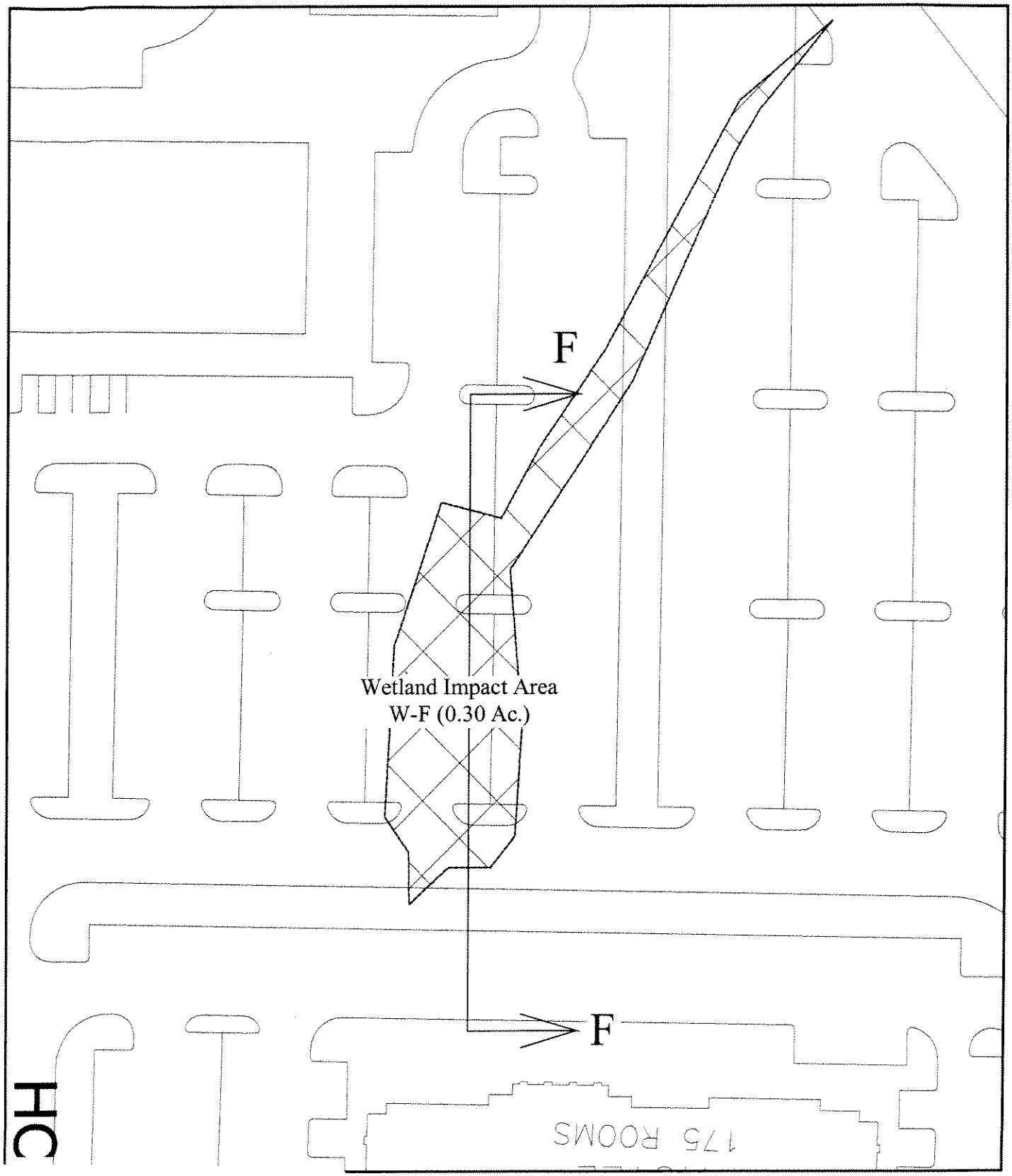

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 12 OF 25

Figure 16

Figure 16
Cypress Creek Town Center
Wetland Impact F

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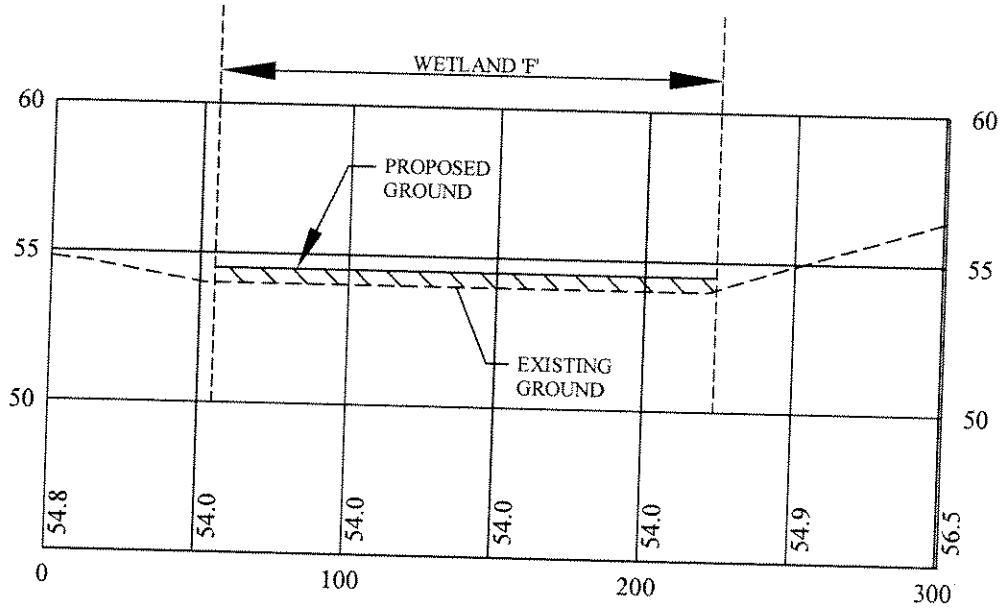

CROSS SECTION F-F
VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 13 OF 25

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Figure 16a

Figure 16a
Cypress Creek Town Center
Cross Section F-F

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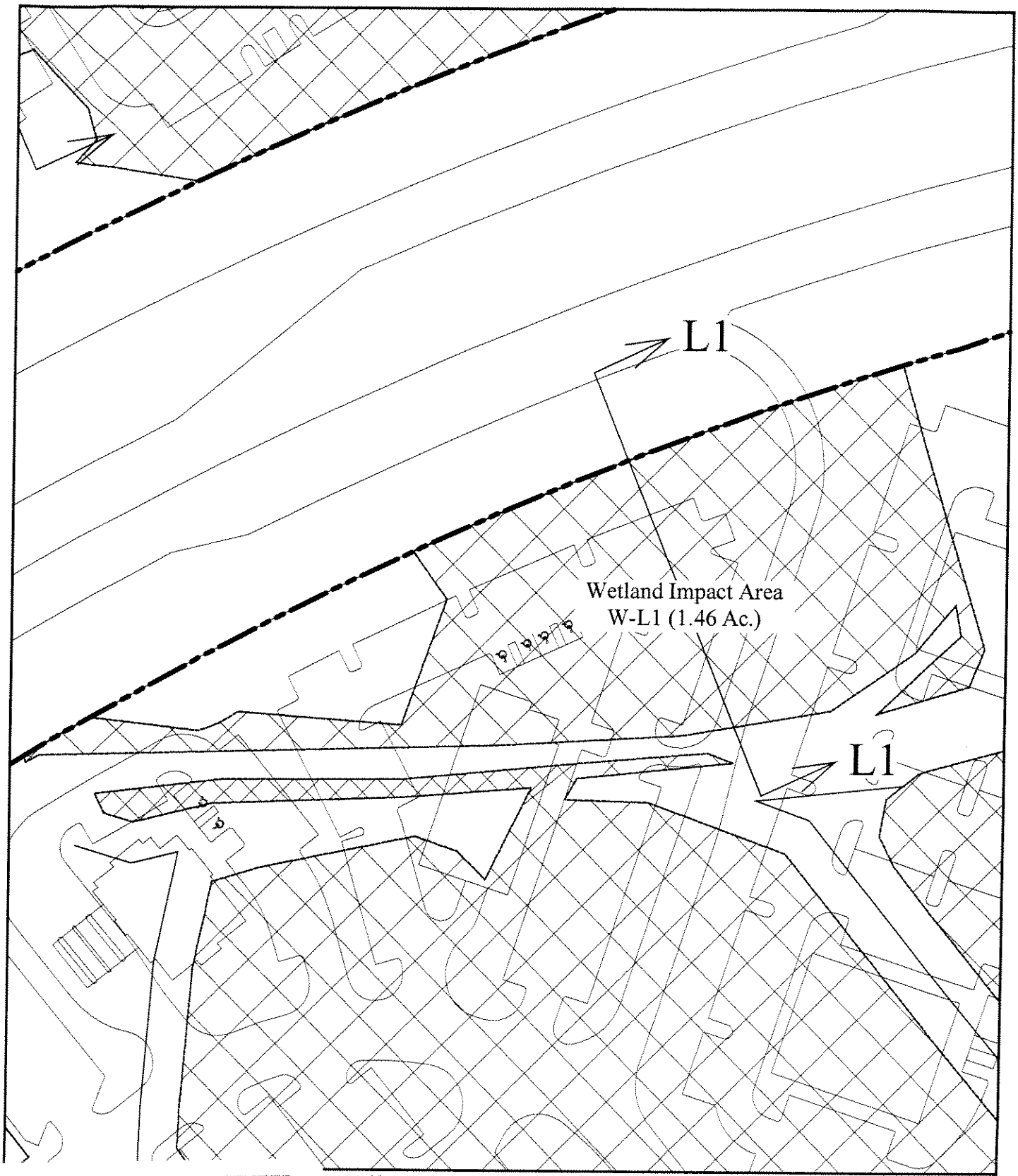

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 14 OF 25

Figure 17

Figure 17
Cypress Creek Town Center
Wetland Impact F

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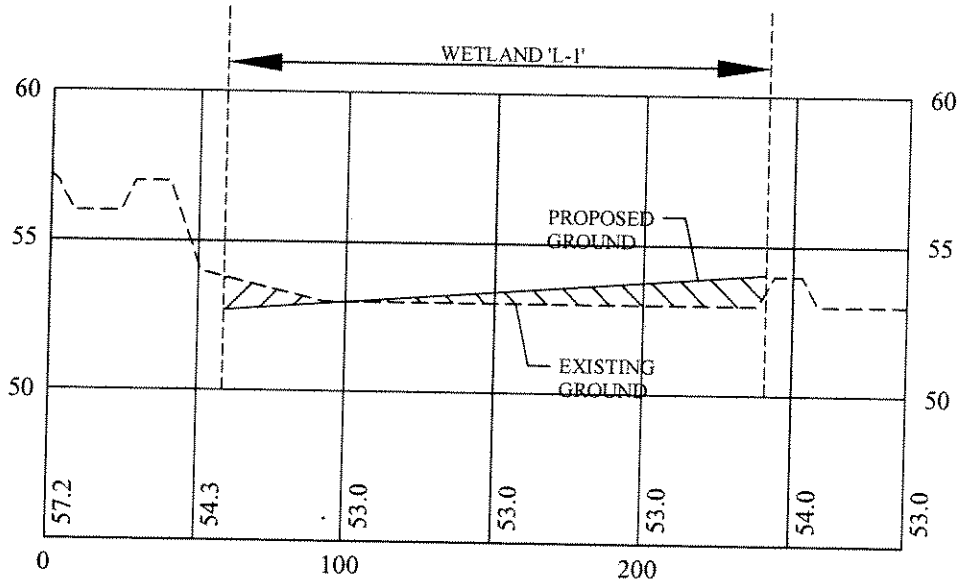

CROSS SECTION L1-L1

VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 15 OF 25

Figure 17a

Figure 17a
Cypress Creek Town Center
Cross Section L1-L1

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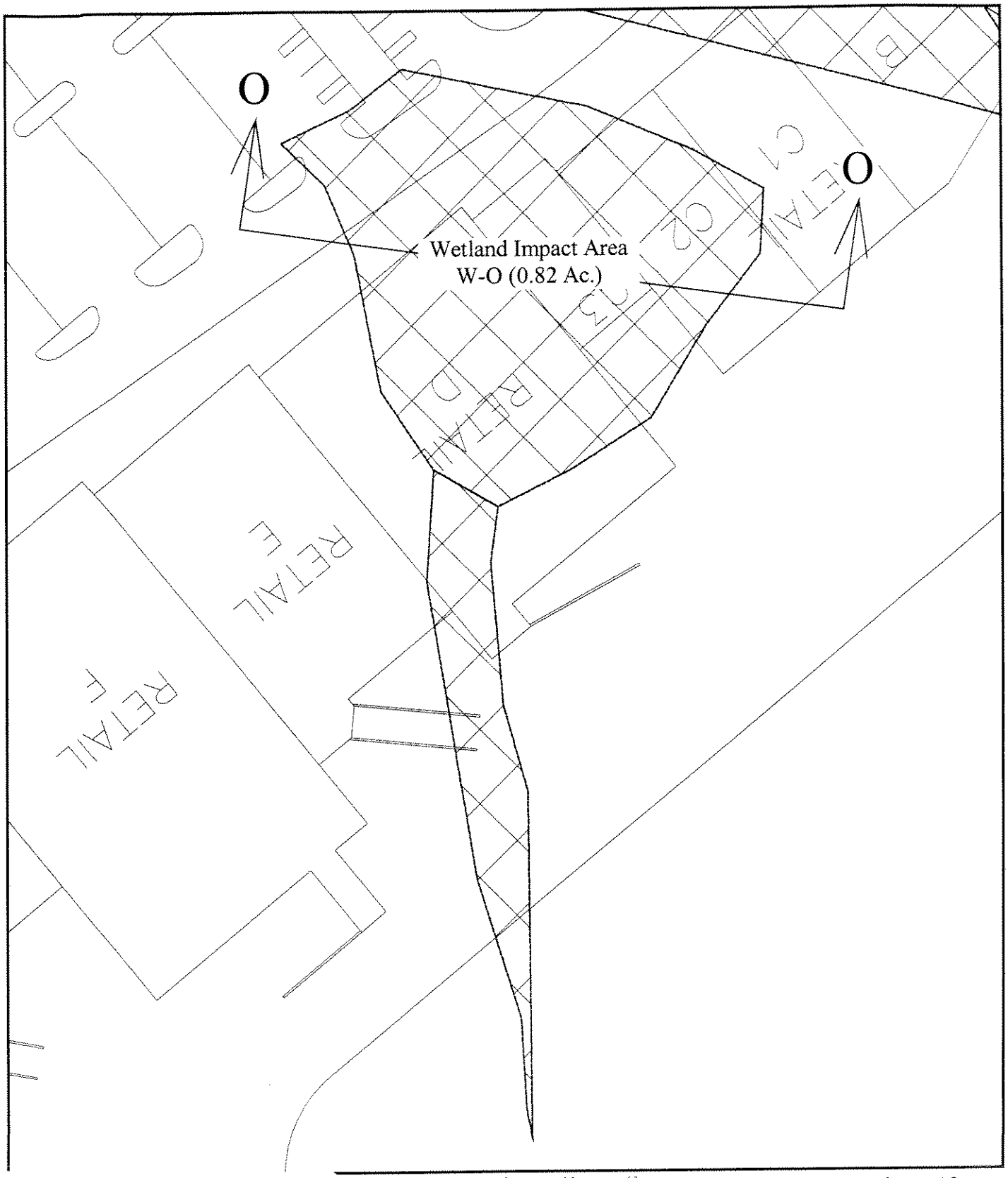

60 0 30 60 1 inch = 60 ft.

Figure 18

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 16 OF 25

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Figure 18
Cypress Creek Town Center
Wetland Impact O

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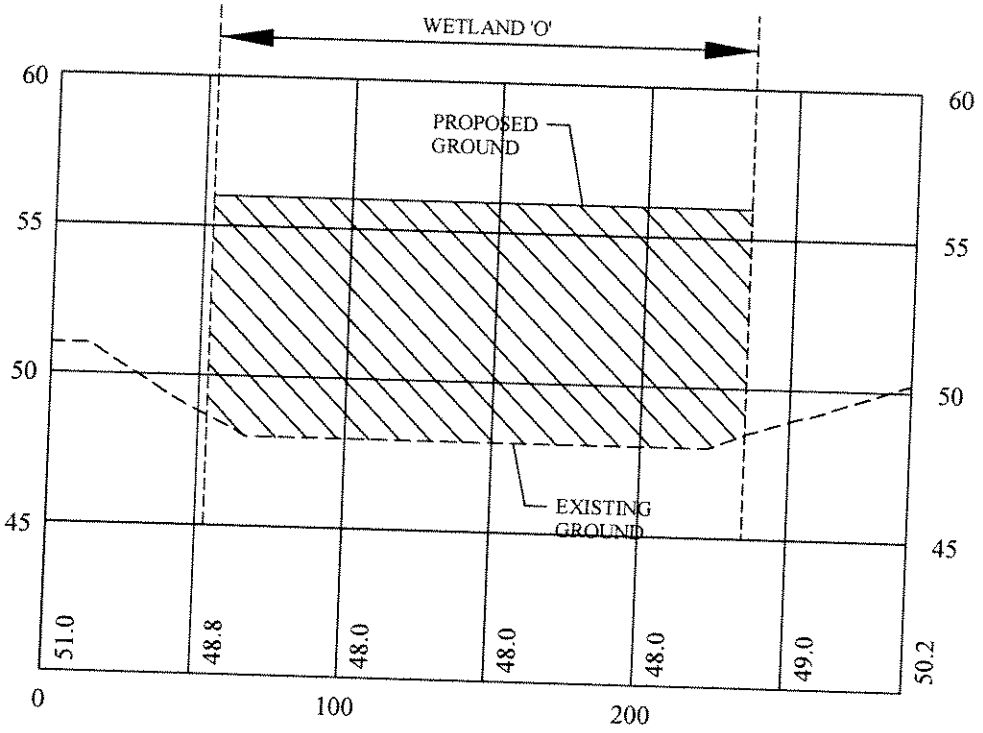

CROSS SECTION O-O

VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 17 OF 25

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Figure 18a

Figure 18a
Cypress Creek Town Center
Cross Section O-O

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Figure 19

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 18 OF 25

Figure 19
Cypress Creek Town Center
Wetland Impact T

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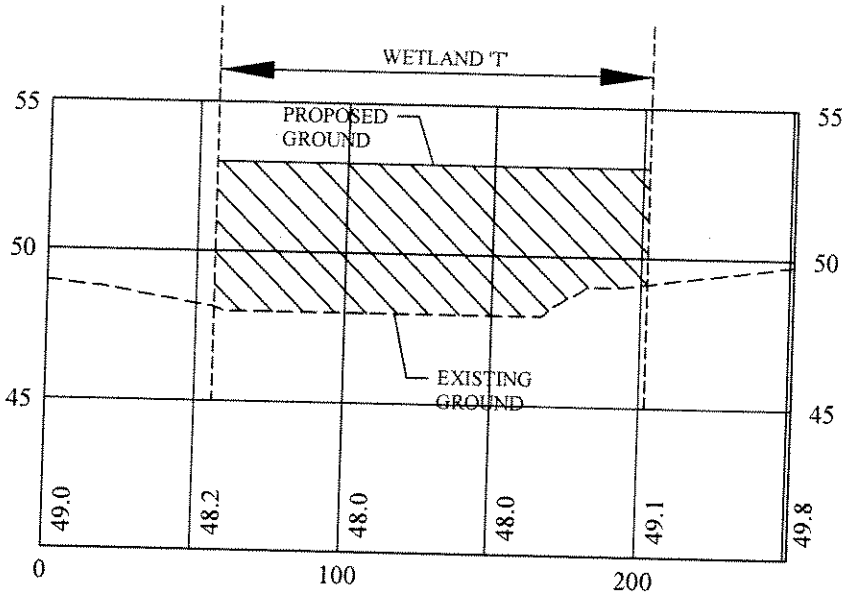

CROSS SECTION T-T

VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 19 OF 25

Figure 19a

Figure 19a
Cypress Creek Town Center
Cross Section T-T

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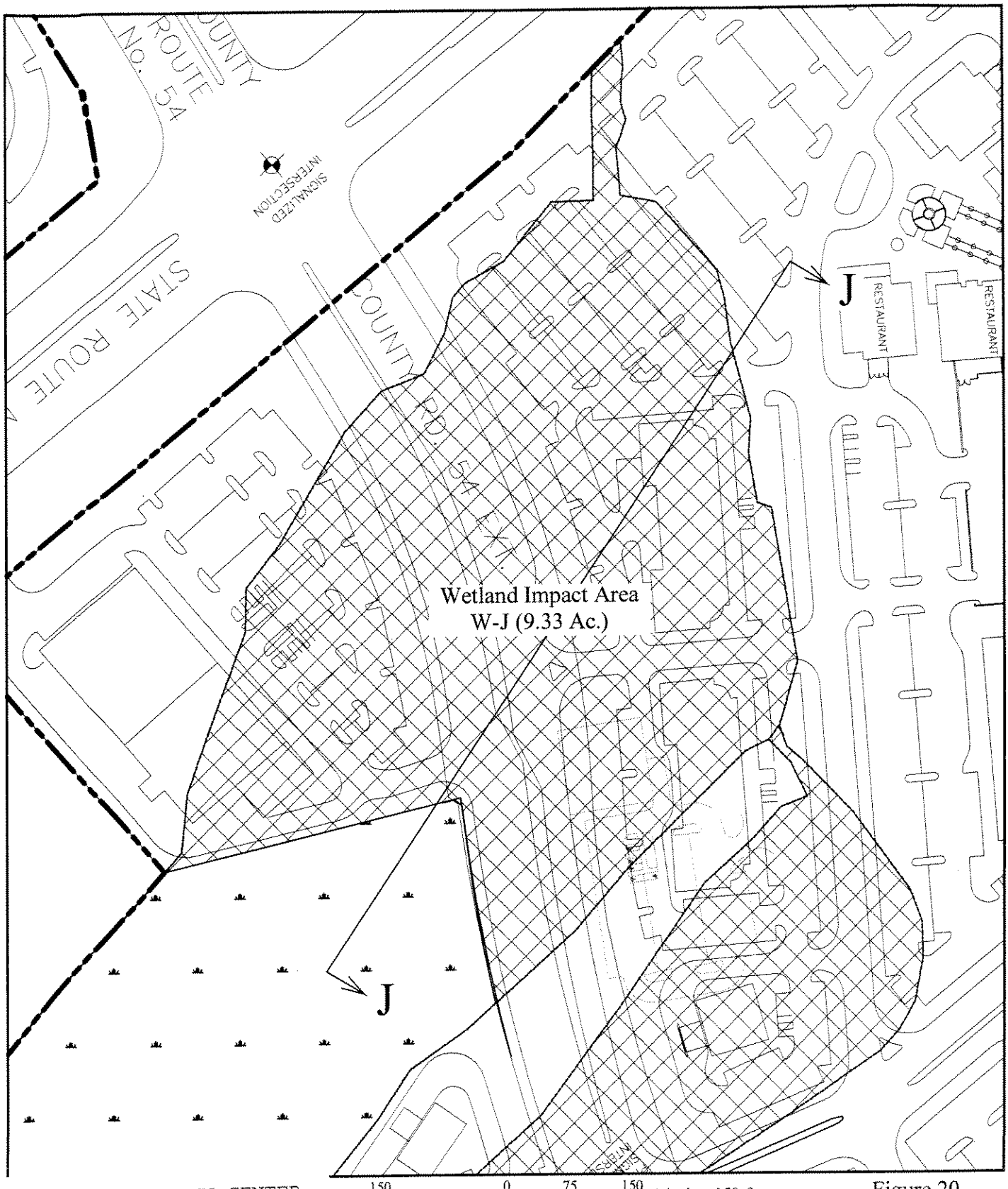

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 20 OF 25

Figure 20

Figure 20
Cypress Creek Town Center
Wetland Impact J

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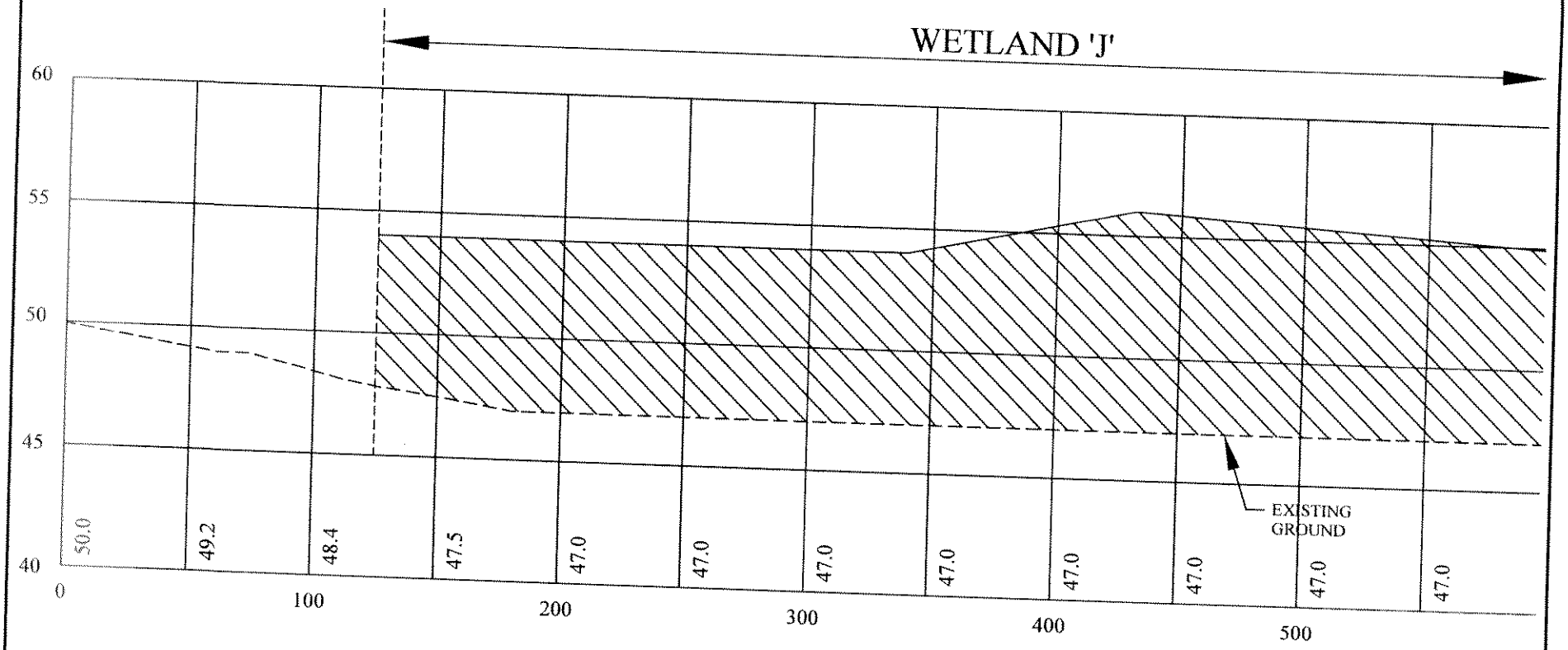
Q:\gis\7724001\working\cad\BRA-Cypress-Creek-COE.dwg



CROSS SECTION J-J
VERT 1" = 6' HORZ 1" = 60'

Figure 20a

Figure 20a
Cypress Creek Town Center
Cross Section J-J

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ATTACHMENT 1
SHEET 21 OF 25

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

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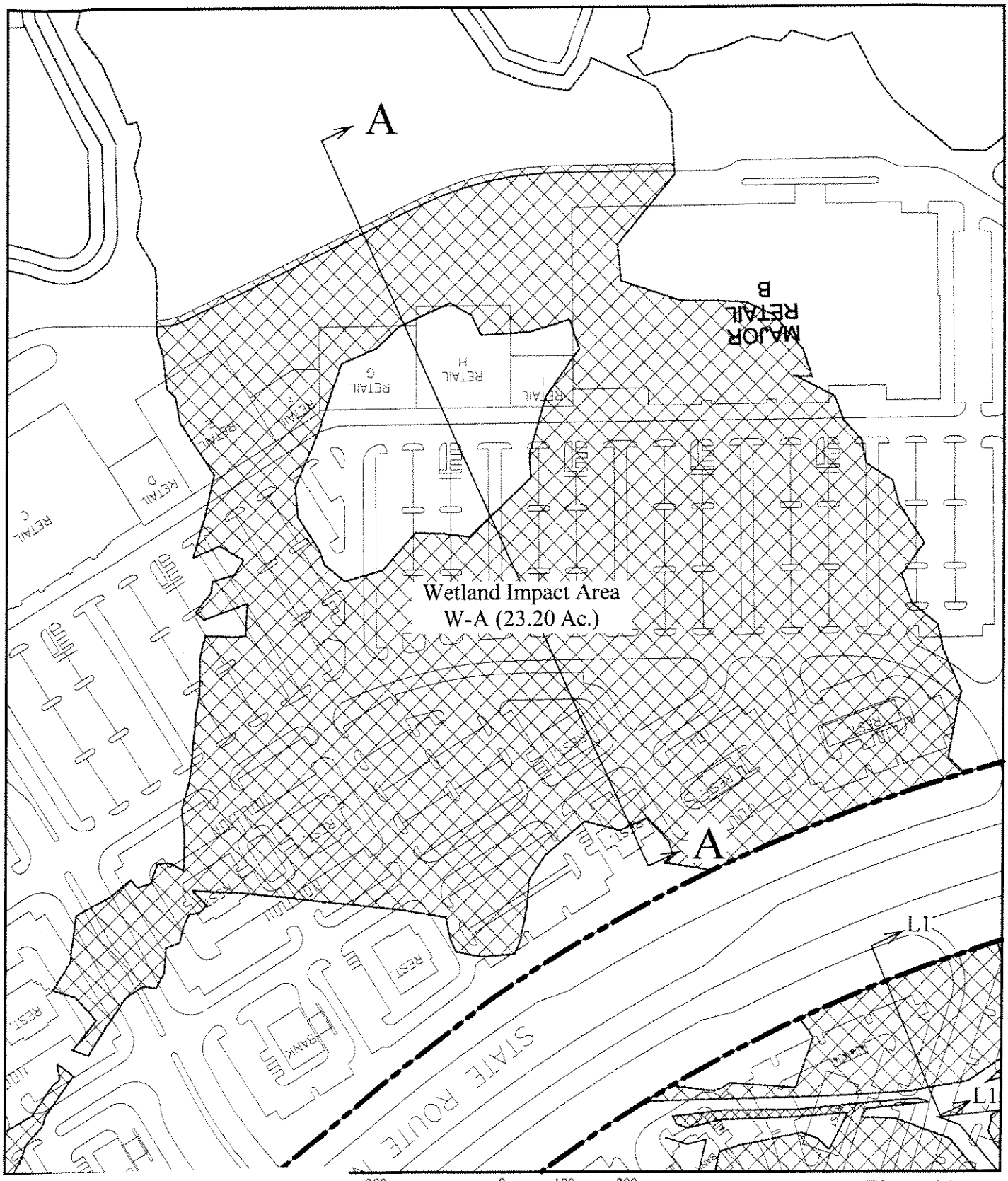

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 22 OF 25

Figure 21

Figure 21
Cypress Creek Town Center
Wetland Impact A

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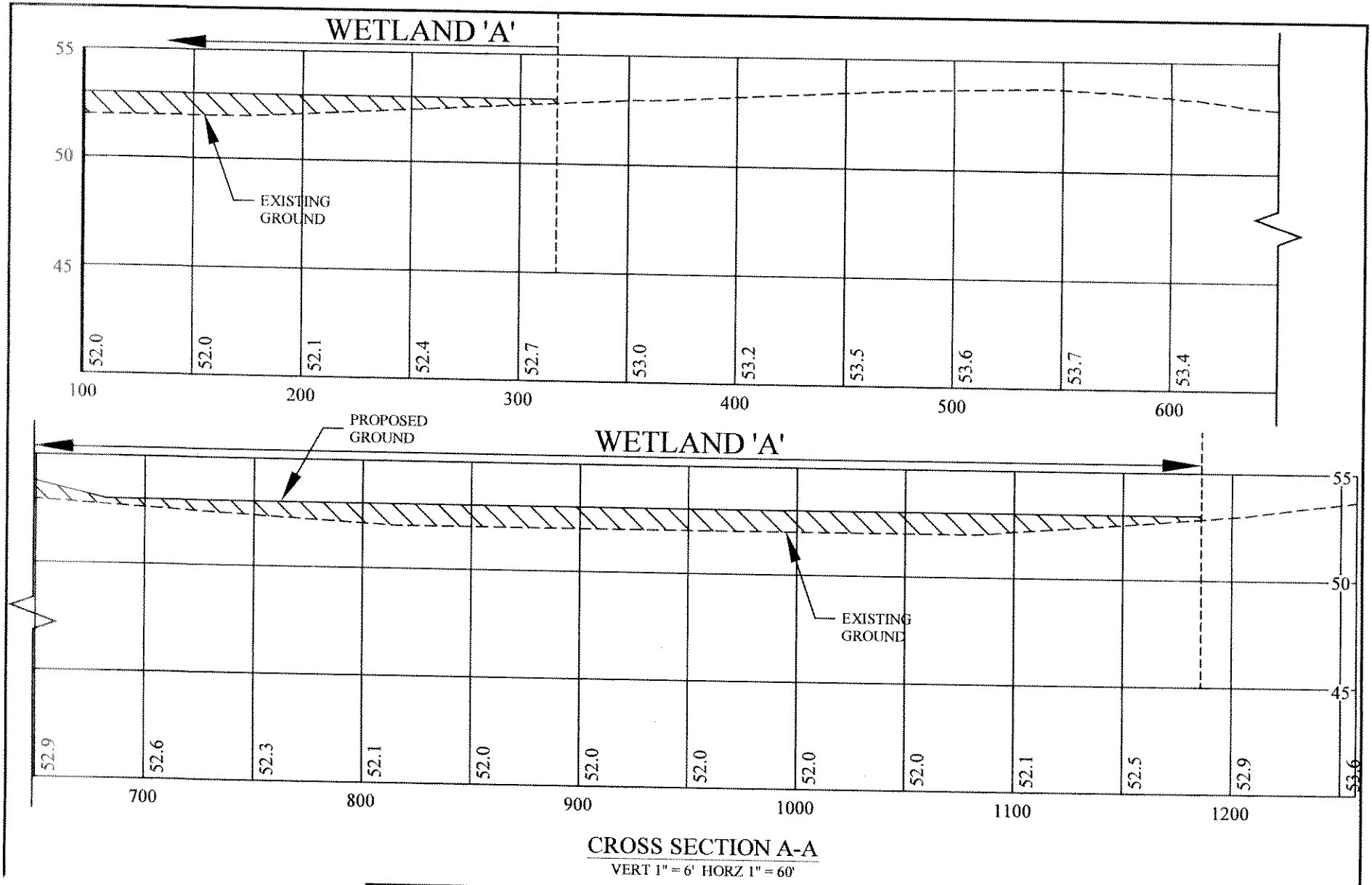

CROSS SECTION A-A

VERT 1" = 6' HORZ 1" = 60'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 23 OF 25

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Figure 21a

Figure 21a
Cypress Creek Town Center
Cross Section A-A

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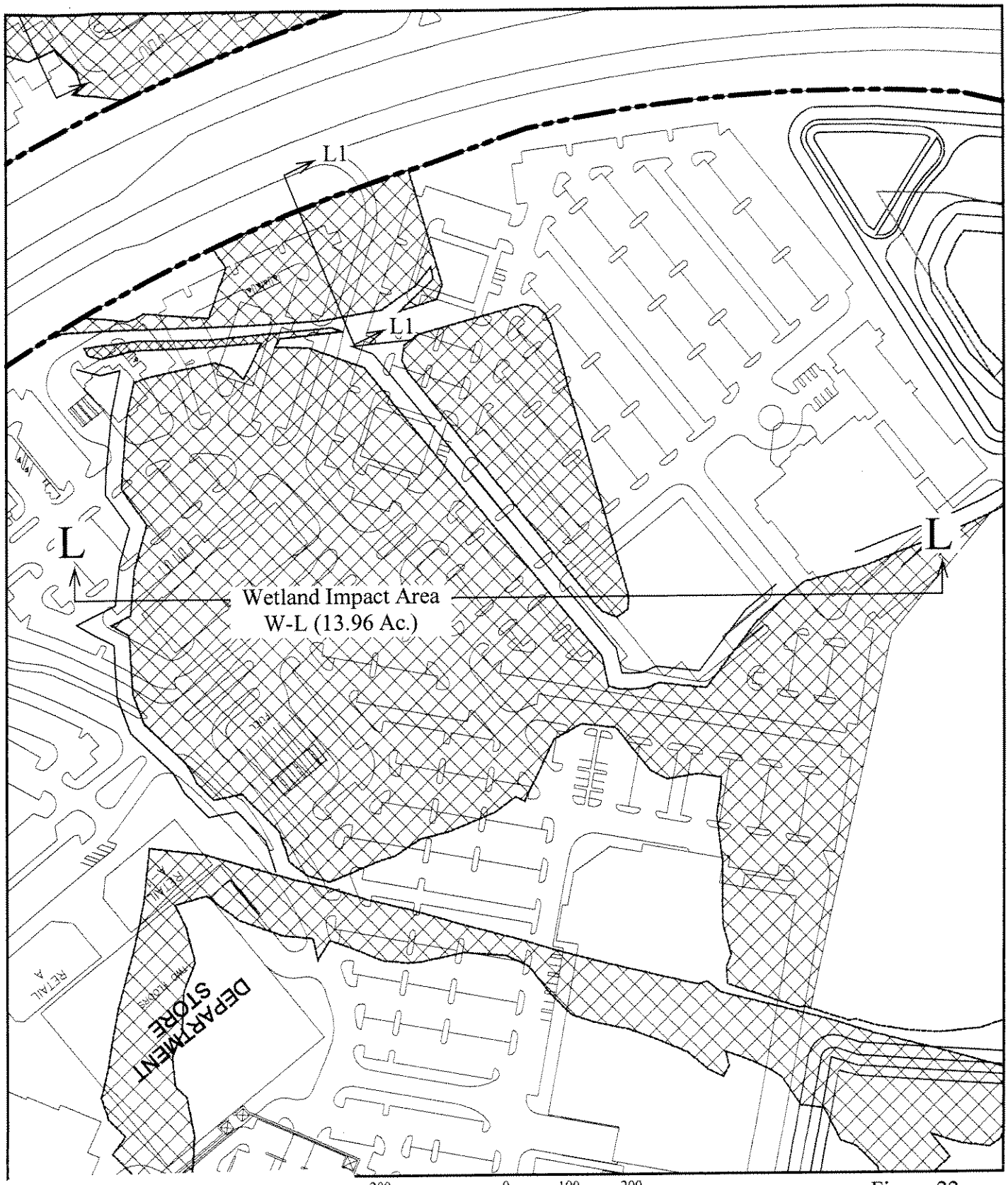

Figure 22

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 24 OF 25

Figure 22
Cypress Creek Town Center
Wetland Impact L

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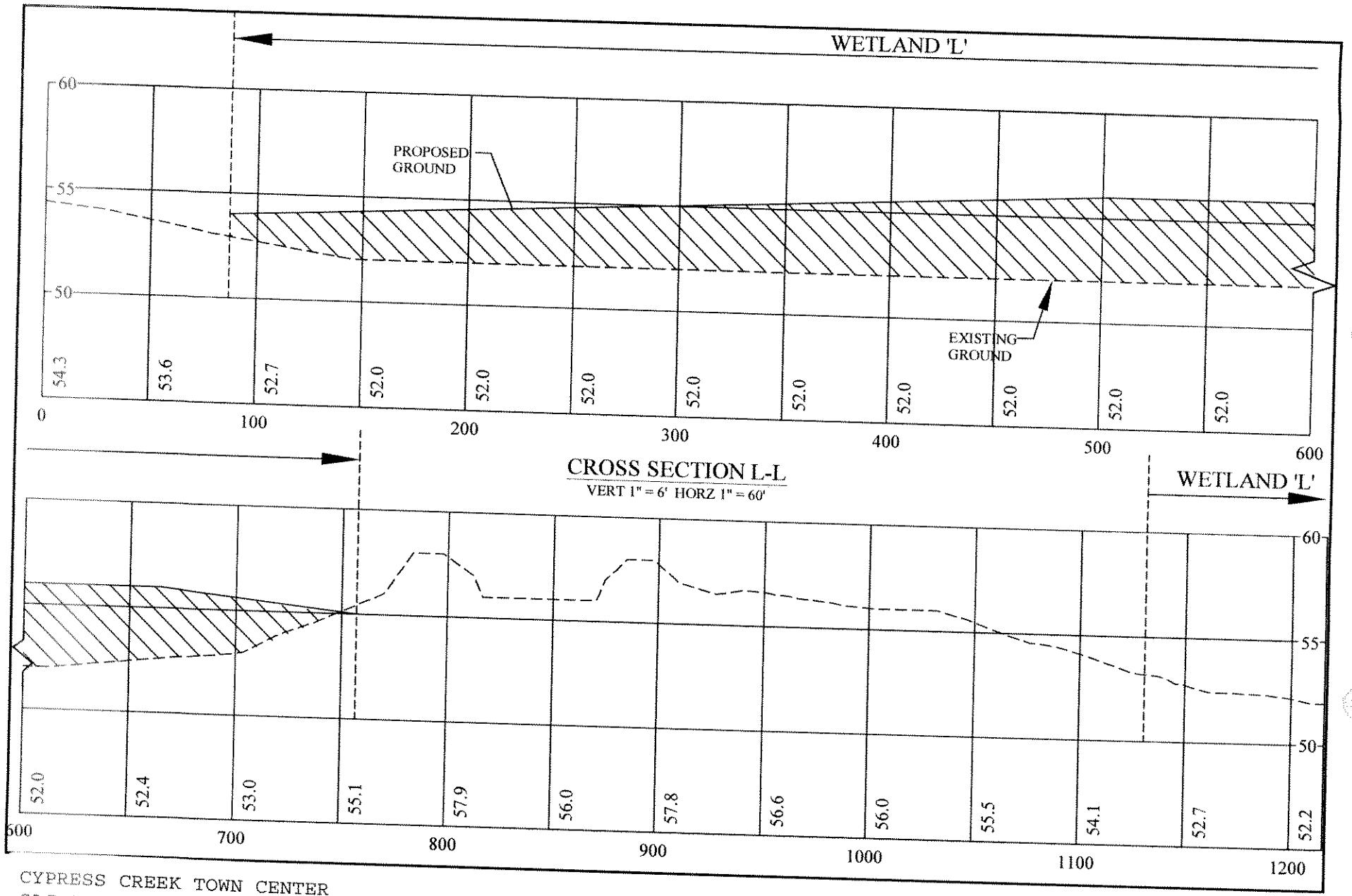
Q:\gis\7724\001\working\cad\BRA-Cypress-Creek-COE.dwg



CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 1
SHEET 25 OF 25

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Figure 22a

Figure 22a
Cypress Creek Town Center
Cross Section L-L

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RIVERVIEW, FL 33569
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ATTACHMENT 2

WATER QUALITY CERTIFICATION

Southwest Florida
Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899
(352) 796-7211 or 1-800-423-1476 (FL only)
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)
On the Internet at: WaterMatters.org

An Equal Opportunity Employer

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)
SUNCOM 572-6200

Lecanto Service Office
Suite 226
3600 West Sovereign Path
Lecanto, Florida 34461-8070
(352) 527-8131

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)
SUNCOM 531-6900

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)
SUNCOM 578-2070

January 30, 2007

John R. Sierra, Jr.
Pasco 54 Ltd.
Pasco 54, Inc.
Pasco Properties of Tampa Bay, Inc.
509 Guisando de Avila, Suite 200
Tampa, FL 33613

Thomas Gray
Pasco Ranch, Inc.
509 Guisando de Avila, Suite 200
Tampa, FL 33613

Subject: **Notice of Final Agency Action for Approval**
ERP Individual Construction
Permit No.: 43026931.001
Project Name: Cypress Creek Town Center - Ph I
County: Pasco
Sec/Twp/Rge: 24,34/26S/19E

Dear Messrs. Sierra and Gray:

The Environmental Resource permit referenced above was **approved** by the District Governing Board subject to all terms and conditions set forth in the permit.

The enclosed approved construction plans are part of the permit, and construction must be in accordance with these plans.

If you have questions concerning the permit, please contact Andrea R. Smith, at the Brooksville Service Office, extension 4375. For assistance with environmental concerns, please contact Barry D. Billets, extension 4371.

Sincerely,

Paul W. O'Neil, Jr., P.E., Director
Regulation Performance Management Department

PWO:dkh
Enclosures: Approved Permit w/Conditions Attached
Approved Construction Drawings
Statement of Completion
Notice of Authorization to Commence Construction
cc/enc: File of Record 43026931.001
Thomas P. Schmitz, The Richard E. Jacobs Group, Inc.
Bruce H. McArthur, Otero Engineering
David A. Kemper, P.E., WilsonMiller, Inc.
US Army Corps of Engineers

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
INDIVIDUAL CONSTRUCTION
PERMIT NO. 43026931.001

Expiration Date: January 30, 2012 PERMIT ISSUE DATE: January 30, 2007

This permit is issued under the provisions of Chapter 373, Florida Statutes, (F.S.), and the Rules contained in Chapters 40D-4 and 40, Florida Administrative Code, (F.A.C.). The permit authorizes the Permittee to proceed with the construction of a surface water management system in accordance with the information outlined herein and shown by the application, approved drawings, plans, specifications, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). Unless otherwise stated by permit specific condition, permit issuance constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341. All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: Cypress Creek Town Center - Ph I

GRANTED TO: Pasco 54 Ltd.
Pasco 54, Inc.
Pasco Properties of Tampa Bay, Inc.
Pasco Ranch, Inc.
509 Guisando de Avila, Suite 200
Tampa, FL 33613

ABSTRACT: This permit is for the construction of a new surface water management system to serve a 404.03-acre commercial development. In addition to the 404.03-acre commercial development, an additional wetland mitigation project area of 249.1-acres is included within the limits of this project for a total project area of 653.13 acres. The commercial development project site is located on the north and south sides of State Road 56, just west of I-75 in Pasco County. The wetland mitigation project area is located in southeastern Pasco County, just north of the Pasco/Hillsborough County line and just west of the Pasco/Polk County line. Information regarding the surface water management system and wetlands is contained within the tables below.

OP. & MAINT. ENTITY: Pasco 54 Ltd., Pasco 54, Inc., Pasco Ranch, Inc., and Pasco Properties of Tampa Bay, Inc.

COUNTY: Pasco

SEC/TWP/RGE: 24,34/26S/19E

TOTAL ACRES OWNED OR UNDER CONTROL: 746.15

PROJECT SIZE: 653.13 Acres

LAND USE: Commercial

DATE APPLICATION FILED: September 12, 2005

AMENDED DATE: N/A

I. Water Quantity/Quality

POND NO.	AREA ACRES @ TOP OF BANK	TREATMENT TYPE
A	7.98	Wet Detention
Wetland	36.00	Isolated Wetland
C	10.10	Wet Detention
D	12.59	Wet Detention
E	12.00	Wet Detention
F	2.40	Wet Detention
30	4.20	N/A
TOTAL	85.27	

A mixing zone is not required.
A variance is not required.

II. 100-Year Floodplain

Encroachment (Acre-Feet of fill)	Compensation (Acre-Feet of excavation)	Compensation Type*	Encroachment Result**(feet)
192.00	214.40	**MI** [X]	Depth [N/A]

***Codes** [X] for the type or method of compensation provided are as follows:
MI = Minimal **I**mpact based on modeling of existing stages vs. post-project encroachment.
N/A = Not **A**pplicable

Depth of change in flood stage (level) over existing receiving water stage resulting from floodplain encroachment caused by a project that claims **MI type of compensation.

III. Environmental Considerations

Wetland/Surface Water Information **Count of Wetlands: 24**

Wetland Name	Total Acres	Not Impacted Acres	Permanent Impacts		Temporary Impacts	
			Acres	Functional Loss*	Acres	Functional Loss*
WL-A	35.32	12.05	23.27	15.51	0.00	0.00
WL-A1	13.65	13.47	0.18	0.09	0.00	0.00
WL-A2	0.84	0.00	0.84	0.34	0.00	0.00
WL-C	0.20	0.20	0.00	0.00	0.00	0.00
WL-D	0.43	0.43	0.00	0.00	0.00	0.00
SW-D1	1.62	0.00	1.62	0.00	0.00	0.00
SW-D2	1.91	0.00	1.91	0.00	0.00	0.00

Wetland Name	Total Acres	Not Impacted Acres	Permanent Impacts		Temporary Impacts	
			Acres	Functional Loss*	Acres	Functional Loss*
WL-E	9.50	9.50	0.00	0.00	0.00	0.00
WL-E1	0.72	0.72	0.00	0.00	0.00	0.00
WL-F	0.30	0.00	0.30	0.00	0.00	0.00
WL-G	2.54	0.00	2.54	1.44	0.00	0.00
WL-H	3.73	0.00	3.73	2.36	0.00	0.00
WL-I	0.59	0.00	0.59	0.30	0.00	0.00
WL-J	24.29	14.95	9.34	6.54	0.00	0.00
WL-J1	0.04	0.04	0.00	0.00	0.00	0.00
WL-L	25.74	10.97	14.77	9.36	0.00	0.00
WL-L1	1.46	0.00	1.46	0.73	0.00	0.00
SW-N	4.43	0.00	4.43	2.51	0.00	0.00
WL-O	0.82	0.00	0.82	0.52	0.00	0.00
WL-P	33.18	33.16	0.02	0.01	0.00	0.00
WL-R	5.01	5.01	0.00	0.00	0.00	0.00
SW-S	0.44	0.00	0.44	0.00	0.00	0.00
SW-T	0.18	0.00	0.18	0.00	0.00	0.00
SW-U	1.09	0.00	1.09	0.69	0.00	0.00
TOTAL:	168.03	100.50	67.53	40.40	0.00	0.00

*** For impacts that do not require mitigation, their functional loss is not included.**

Wetland Comments: There are 158.36 acres of wetlands and 9.67 acres of surface waters within the project. Construction will result in permanent impact to 57.56 acres of wetlands and 5.52 acres of surface waters requiring habitat mitigation, and permanent impact to 0.30 acre of wetland and 4.15 acres of surface waters exempt from habitat mitigation. Using the Uniform Mitigation Assessment Method (UMAM) the Functional Loss of the impacts requiring habitat mitigation was determined to be 40.40 units. Since under the ERP Basis of Review (Section 3.2.2.1) no significant habitat is provided by the 0.30 acre of isolated wetland and it is less than one half acre in size, no habitat mitigation is required.

Mitigation Information

Count of Mitigation: 13

Mitigation Name	Creation/Restoration		Enhancement		Preservation		Other	
	Acres	Functional Gain	Acres	Functional Gain	Acres	Functional Gain	Acres	Functional Gain
Wetland Restoration A	14.80	5.93	0.00	0.00	0.00	0.00	0.00	0.00
Wetland Enhancement A	0.00	0.00	4.20	0.33	0.00	0.00	0.00	0.00
Wetland Enhancement A	0.00	0.00	7.90	1.58	0.00	0.00	0.00	0.00
Wetland Enhancement A	0.00	0.00	1.40	0.28	0.00	0.00	0.00	0.00
Wetland Enhancement A	0.00	0.00	3.80	0.38	0.00	0.00	0.00	0.00
Wetland Enhancement A	0.00	0.00	2.90	0.48	0.00	0.00	0.00	0.00

Mitigation Name	Creation/Restoration		Enhancement		Preservation		Other	
	Acres	Functional Gain	Acres	Functional Gain	Acres	Functional Gain	Acres	Functional Gain
Wetland Enhancement A	0.00	0.00	25.50	1.28	0.00	0.00	0.00	0.00
Wetland Preservation	0.00	0.00	0.00	0.00	33.80	1.80	0.00	0.00
Wetland Preservation	0.00	0.00	0.00	0.00	4.90	0.13	0.00	0.00
Upland Enhancement	0.00	0.00	23.20	4.64	0.00	0.00	0.00	0.00
Upland Enhancement	0.00	0.00	19.40	3.23	0.00	0.00	0.00	0.00
Upland Preservation A	0.00	0.00	0.00	0.00	71.00	28.76	0.00	0.00
Upland Preservation A	0.00	0.00	0.00	0.00	35.70	14.46	0.00	0.00
TOTAL:	14.80	5.93	88.30	12.20	145.40	45.15	0.00	0.00

Mitigation Comments: To mitigate for 57.56 acres of wetlands and 5.52 acres of surface waters requiring habitat mitigation, the Permittee will establish regionally significant mitigation within the Alston Tract adjacent to District land (Upper Hillsborough) and create 14.8 acres of wetland, enhance 45.7 acres of wetlands and 42.6 acres of uplands, and preserve 38.7 acres of wetlands and 106.7 acres of uplands via a dedicated conservation easement to the District. The Functional Gain of the mitigation was determined to be 63.28 units. Since the Functional Gain of the mitigation is greater than the 40.40 units of Functional Loss, the wetland and surface water impacts are offset by the mitigation. The excess Functional Gain identified in this permit is not available for future applications.

A regulatory conservation easement is required.

A proprietary conservation easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each landowner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.

2. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

   Brooksville Regulation Department
   Southwest Florida Water Management District
   2379 Broad Street
   Brooksville, FL 34604-6899

   The permit number, title of report or information and event (for recurring report or information submittal) shall be identified on all information and reports submitted.

3. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.

4. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Brooksville Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1.659, F.A.C., and signed, dated and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.

5. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal efficiency of the surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.

6. WETLAND MITIGATION SUCCESS CRITERIA: WETLAND CREATION AREA 1, 14.8 Acres

Mitigation is expected to offset adverse impacts to wetlands and other surface waters caused by regulated activities and to achieve viable, sustainable ecological and hydrological wetland functions. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

A. The mitigation area can be reasonably expected to develop into a Freshwater Marsh (641) as determined by the Florida Department of Transportation Florida Land Use, Cover and Forms Classification System.

B. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "A."

C. The dominant and subdominant species of desirable wetland plants comprising each vegetation zone and stratum of the mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES[1]	SUBDOMINANT SPECIES[1]
Marsh	Shrub	30	Buttonbush	Other Desirable Species
	Ground	85	Pickerelweed	Arrowhead
				Other Desirable Species
Wet Prairie	Shrub	10	Other Desirable Species	Other Desirable Species
	Ground	85	Other Desirable Species	Other Desirable Species

[1] Plant species providing the same function as those listed may also be considered in determining success. Other Desirable Species are indicated in the approved construction plans for the mitigation.

This criterion must be achieved within nine years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

D. Species composition of recruiting wetland vegetation are indicative of the wetland type specified in criterion "A."

E. Coverage by nuisance or exotic species does not exceed 5 percent.

F. The wetland mitigation area can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

The mitigation area may be released from monitoring and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site conditions are sustainable.

WETLAND MITIGATION SUCCESS CRITERIA WETLAND ENHANCEMENT AREA 1, 4.2 ACRES

Mitigation is expected to offset adverse impacts to wetlands and other surface waters caused by regulated activities and to achieve viable, sustainable ecological and hydrological wetland functions. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

A. The mitigation area can be reasonably expected to develop into a Wetland Hardwood Forest Stream and Lake Swamp (615) as determined by the Florida Department of Transportation Florida Land Use, Cover And Forms Classification System.

B. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "A."

C. The dominant and subdominant species of desirable wetland plants comprising each vegetation zone and stratum of the mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES	SUBDOMINANT SPECIES
Slough Long Hydroperiod Areas	Canopy	30	Bald Cypress	Swamp tupelo
				Pop Ash
				Other Desirable Species
	Shrub	5	Buttonbush	

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES[1]	SUBDOMINANT SPECIES[2]
	Groundcover	N/A	Pickerelweed	Arrowroot
				Other Desirable Species
Slough Short Hydroperiod Areas	Canopy	30	Laurel Oak	Other Desirable Species
	Shrub	5	Virginia Willow	Other Desirable Species
Hydric Flatwood	Canopy	85	Slash Pine	Other Desirable Species
	Shrub			Other Desirable Species
	Ground			Other Desirable Species

[1] Tree species must be greater than 12 feet in height and have been planted for greater than 3 years.

[2] Plant species providing the same function as those listed may also be considered in determining success. Other Desirable Species are indicated in the approved construction plans for the mitigation.

This criterion must be achieved within nine years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

D. Species composition of recruiting wetland vegetation are indicative of the wetland type specified in criterion "A."

E. Density of planted trees surviving in the mitigation area (Slough) equals or exceeds 435/acre for trees greater than or equal to 12 feet in height.

F. Density of planted trees surviving in the mitigation area (Hydric Flatwoods) equals or exceeds 20/acre for trees greater than or equal to 12 feet in height.

G. Coverage by nuisance or exotic species does not exceed 5 percent.

H. The wetland mitigation area can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

The mitigation area may be released from monitoring and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site conditions are sustainable.

WETLAND MITIGATION SUCCESS CRITERIA WETLAND ENHANCEMENT AREA 3, 7.9 ACRES and WETLAND ENHANCEMENT AREA 4, 1.4 ACRES

Mitigation is expected to offset adverse impacts to wetlands and other surface waters caused by regulated activities and to achieve viable, sustainable ecological and hydrological wetland functions. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

A. The mitigation area can be reasonably expected to develop into a Freshwater Marsh (641) as determined by the Florida Land Use, Cover And Forms Classification System.

B. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "A."

C. The dominant and subdominant species of desirable wetland plants comprising each vegetation zone and stratum of the mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES[1]	SUBDOMINANT SPECIES[1]
Marsh	Shrub	30	Buttonbush	Other Desirable Species
	Groundcover	85	Pickerelweed	Arrowhead
				Other Desirable Species
Wet Prairie	Shrub	10	Other Desirable Species	Other Desirable Species
	Groundcover	85	Other Desirable Species	Other Desirable Species

1 Plant species providing the same function as those listed may also be considered in determining success. Other Desirable Species are indicated in the approved construction plans for the mitigation.

This criterion must be achieved within 9 years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

D. Species composition of recruiting wetland vegetation are indicative of the wetland type specified in criterion "A."

E. Coverage by nuisance or exotic species does not exceed 5 percent.

F. The wetland mitigation area can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

The mitigation area may be released from monitoring and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site conditions are sustainable.

WETLAND MITIGATION SUCCESS CRITERIA - WETLAND ENHANCEMENT AREA 5, 3.8 ACRES, WETLAND ENHANCEMENT AREA 8, 2.9 ACRES AND WETLAND ENHANCEMENT AREA 9, 25.5 ACRES

Mitigation is expected to offset adverse impacts to wetlands and other surface waters caused by regulated activities and to achieve viable, sustainable ecological and hydrological wetland functions. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

A. The mitigation area can be reasonably expected to develop into a Wetland Coniferous Forest-Cypress (621) as determined by the Florida Land Use, Cover And Forms Classification System.

B. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "A."

C. The dominant and subdominant species of desirable wetland plants comprising each vegetation zone and stratum of the mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES[1]	SUBDOMINANT SPECIES[1]
Cypress	Canopy	30	Pond Cypress	Other Desirable Species
	Shrub	10	Buttonbush	Other Desirable Species
	Groundcover		Pickerelweed	Arrowhead
				Other Desirable Species

[1] Plant species providing the same function as those listed may also be considered in determining success. Other Desirable Species are indicated in the approved construction plans for the mitigation.

This criterion must be achieved within nine years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

D. Species composition of recruiting wetland vegetation are indicative of the wetland type specified in criterion "A."

E. Coverage by nuisance or exotic species does not exceed 5 percent.

F. The wetland mitigation area can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

The mitigation area may be released from monitoring and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site conditions are sustainable.

WETLAND MITIGATION SUCCESS CRITERIA UPLAND ENHANCEMENT AREA 1, 23.2 ACRES

Mitigation is expected to offset adverse impacts to wetlands and other surface waters caused by regulated activities and to achieve viable, sustainable ecological and hydrological wetland functions. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

A. The mitigation area can be reasonably expected to develop into an Upland Coniferous Forest-Pine Flatwoods (411) as determined by the Florida Land Use, Cover And Forms Classification System.

B. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "A."

C. The dominant and subdominant species of desirable wetland plants comprising each vegetation zone and stratum of the mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES[1]	SUBDOMINANT SPECIES[2]
Mesic Flatwood	Canopy		Longleaf Pine	Other Desirable Species
	Shrub		Other Desirable Species	Other Desirable Species
	Ground		Other Desirable Species	Other Desirable Species

1 Tree species must be greater than 12 feet in height and have been planted for greater than 3 years.
2 Plant species providing the same function as those listed may also be considered in determining success. Other Desirable Species are indicated in the approved construction plans for the mitigation.

This criterion must be achieved within nine years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

D. Species composition of recruiting wetland vegetation are indicative of the wetland type specified in criterion "A."

E. Density of trees surviving in the Mesic Flatwoods mitigation area equals or exceeds 10/acre for trees greater than or equal to 12 feet in height.

F. Coverage by nuisance or exotic species does not exceed 5 percent.

WETLAND MITIGATION SUCCESS CRITERIA UPLAND ENHANCEMENT AREA 2, 19.40 ACRES

Mitigation is expected to offset adverse impacts to wetlands and other surface waters caused by regulated activities and to achieve viable, sustainable ecological and hydrological wetland functions. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

A. The mitigation area can be reasonably expected to develop into Rangeland-Herbaceous (310) as determined by the Florida Land Use, Cover And Forms Classification System.

B. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "A."

C. The dominant and subdominant species of desirable wetland plants comprising each vegetation zone and stratum of the mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES[1]	SUBDOMINANT SPECIES[1]
Savanna	Shrub		Other Desirable Species	Other Desirable Species
	Ground		Other Desirable Species	Other Desirable Species

[1] Plant species providing the same function as those listed may also be considered in determining success. Other Desirable Species are indicated in the approved construction plans for the mitigation.

This criterion must be achieved within nine years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

D. Species composition of recruiting wetland vegetation are indicative of the wetland type specified in criterion "A."

E. Coverage by nuisance or exotic species does not exceed 5 percent.

F. The wetland mitigation area can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

The mitigation area may be released from monitoring and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site conditions are sustainable.

7. The Permittee shall monitor and maintain the wetland mitigation areas until the criteria set forth in the Wetland Mitigation Success Criteria Conditions above are met. The Permittee shall perform corrective actions identified by the District if the District identifies a wetland mitigation deficiency.

8. The Permittee shall undertake required maintenance activities within the wetland mitigation areas as needed at any time between mitigation area construction and termination of monitoring, with the exception of the final year. Maintenance shall include the manual removal of all nuisance and exotic species, with sufficient frequency that their combined coverage at no time exceeds the Wetland Mitigation Success Criteria Conditions above. Herbicides shall not be used without the prior written approval of the District.

9. A Wetland Mitigation Completion Report shall be submitted to the District within 30 days of completing construction and planting of the wetland mitigation areas. Upon District inspection and approval of the mitigation areas, the monitoring program shall be initiated with the date of the District field inspection being the construction completion date of the mitigation areas. Monitoring events shall occur between March 1 and November 30 of each year. An Annual Wetland Monitoring Report shall be submitted upon the anniversary date of District approval to initiate monitoring.

   Annual reports shall provide documentation that a sufficient number of maintenance inspection/activities were conducted to maintain the mitigation areas in compliance with the Wetland Mitigation Success Criteria Conditions above. Note that the performance of maintenance inspections and maintenance activities will normally need to be conducted more frequently than the collection of other monitoring data to maintain the mitigation areas in compliance with the Wetland Mitigation Success Criteria Conditions above.

   Monitoring Data shall be collected semi-annually.

10. Termination of monitoring for the wetland mitigation areas shall be coordinated with the District by:

    A. notifying the District in writing when the criteria set forth in the Wetland Mitigation Success Criteria Conditions have been achieved;

    B. suspending all maintenance activities in the wetland mitigation areas including, but not limited to, irrigation and addition or removal of vegetation; and

    C. submitting a monitoring report to the District one year following the written notification and suspension of maintenance activities.

    Upon receipt of the monitoring report, the District will evaluate the wetland mitigation sites to determine if the Mitigation Success Criteria Conditions have been met and maintained. The District will notify the Permittee in writing of the evaluation results. The Permittee shall perform corrective actions for any portions of the wetland mitigation areas that fail to maintain the criteria set forth in the Wetland Mitigation Success Criteria Conditions.

11. In the event wetland impacts for which the preservation parcel is providing mitigation are not conducted, the permittee will notify the District in writing. Upon District verification that these wetland impacts have not occurred, the District will release any executed and recorded conservation easement.

12. Following the District's determination that the wetland mitigation has been successfully completed, the Permittee shall operate and maintain the wetland mitigation areas such that they remain in their current or intended condition for the life of the surface water management facility. The Permittee must perform corrective actions for any portions of the wetland mitigation areas where conditions no longer meet the criteria set forth in the Wetland Mitigation Success Criteria Conditions.

13. The construction of all wetland impacts and wetland mitigation shall be supervised by a qualified environmental scientist/specialist/consultant. The Permittee shall identify, in writing, the environmental professional retained for construction oversight prior to initial clearing and grading activities.

14. Wetland buffers shall remain in an undisturbed condition except for approved drainage facility construction/maintenance.

15. The following boundaries, as shown on the approved construction drawings, shall be clearly delineated on the site prior to initial clearing or grading activities:

    A. wetland and surface water preservation
    B. wetland and surface water buffers
    C. limits of approved wetland and surface water impacts

    The delineation shall endure throughout the construction period and be readily discernible to construction and District personnel.

16. Rights-of-way and easement locations necessary to construct, operate and maintain all facilities, which constitute the permitted surface water management system (including wetlands and wetland buffers), shall be shown on the final plat recorded in the County Public Records. Documentation of this plat recording shall be submitted to the District with the Statement of Completion and Request for Transfer to Operation Entity Form, and prior to beneficial occupancy or use of the site.

17. Copies of the following documents in final form, as appropriate for the project, shall be submitted to the Brooksville Regulation Department:

    A. homeowners, property owners, master association or condominium association articles of incorporation, and

    B. declaration of protective covenants, deed restrictions or declaration of condominium.

    The Permittee shall submit these documents either: (1) within 180 days after beginning construction or with the Statement of Completion and as-built construction plans if construction is completed prior to 180 days, or (2) prior to any lot or unit sales within the project served by the surface water management system, whichever occurs first.

18. The following language shall be included as part of the deed restrictions for each lot:

    "Each property owner within the subdivision at the time of construction of a building, residence, or structure shall comply with the construction plans for the surface water management system approved and on file with the Southwest Florida Water Management District (SWFWMD)."

19. The Permittee shall provide notice of District permitting requirements to all buyers of individual parcels or lots located within Cypress Creek Town Center - Ph I. The notice shall be stated in the sales contract or as a deed restriction and shall include the following instructions:

    "The Buyer is hereby notified that this property is subject to the requirements of Surface Water Management Permit No. 43026931.001 issued by the Southwest Florida Water Management District. In addition, the Buyer is required to inform the Southwest Florida Water Management District at the beginning of construction that a Professional Engineer registered in Florida has been retained to supervise construction; and upon completion of construction on this parcel or lot, the buyer must submit to the District a Statement of Completion and as-built certification of compliance with the permit."

20. The Permittee shall provide notice of District permitting requirements to all buyers of individual parcels or lots located within Cypress Creek Town Center - Ph I. This notice shall be stated in the sales contract or as a deed restriction and shall include the following instructions:

"The Buyer is hereby notified that this property is subject to the requirements of Surface Water Management Permit No. 43026931.001 issued by the Southwest Florida Water Management District. In addition, the Buyer is required to obtain a surface water management permit in accordance with Chapter 40D-4, F.A.C., from the Southwest Florida Water Management District prior to initiating any construction or alteration of a surface water management system on this property."

21. The operation and maintenance entity shall submit inspection reports in the form required by the District, in accordance with the following schedule.

For systems utilizing retention or wet detention, the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.

22. The removal of littoral shelf vegetation (including cattails) from wet detention ponds is prohibited unless otherwise approved by the District. Removal includes dredging, the application of herbicide, cutting, and the introduction of grass carp. Any questions regarding authorized activities within the wet detention ponds shall be addressed to the District's Surface Water Regulation Manager, Brooksville Service Office.

23. For the areas shown on the construction drawings as future, a permit modification shall be obtained for any construction in this/these areas. As a requirement of the permit modification for this/these areas, the Permittee shall submit a Statement of Completion and as-built drawings.

24. If limestone bedrock is encountered during construction of the surface water management system, the District must be notified and construction in the affected area shall cease.

25. The Permittee shall notify the District of any sinkhole development in the surface water management system within 48 hours of discovery and must submit a detailed sinkhole evaluation and repair plan for approval by the District within 30 days of discovery.

26. The District, upon prior notice to the Permittee, may conduct on-site inspections to assess the effectiveness of the erosion control barriers and other measures employed to prevent violations of state water quality standards and avoid downstream impacts. Such barriers or other measures should control discharges, erosion, and sediment transport during construction and thereafter. The District will also determine any potential environmental problems that may develop as a result of leaving or removing the barriers and other measures during construction or after construction of the project has been completed. The Permittee must provide any remedial measures that are needed.

27. The Permittee shall execute the final draft financial responsibility instrument approved by the District prior to initiating activities authorized by this permit. The final draft financial responsibility instrument shall be consistent with the draft instrument submitted with the permit application and approved by this permit.

28. The Permittee shall submit the original executed financial responsibility instrument to the District at the address below:

Brooksville Regulation Department
Southwest Florida Water Management District
2379 Broad Street
Brooksville, FL 34604-6899

29. The Permittee shall provide the financial responsibility required by Rule 40D-4.301(1)(j), Florida Administrative Code until the District determines that the specific success criteria contained in this permit have been met; or the District approves a request to transfer the permit to a new owner and receives an acceptable substitute financial responsibility mechanism from the new owner.

30. The Permittee may request, in writing, a release from the obligation to maintain certain amounts of the financial assurance required by this permit as phases of the mitigation plan are successfully completed. The request shall include documentation that the mitigation phase or phases have been completed and payment for their completion has been made. Following the District's verification that the phase or phases have been completed in accordance with the mitigation plan, the District will authorize release from the applicable portion of the financial assurance obligation.

31. The District will notify the Permittee within 30 days of its determination that the specific success criteria contained in this permit have been met. Concurrent with this notification, the District will authorize, in writing, the appropriate entity to cancel or terminate the financial responsibility instrument.

32. The Permittee's failure to comply with the terms and conditions of this permit pertaining to the successful completion of all mitigation activities in accordance with the mitigation plan shall be deemed a violation of Chapter 40D-4, Florida Administrative Code. In addition to other remedies that the District may have, the District may draw upon the financial responsibility instrument for any funds necessary to remedy a violation, upon such notice to the Permittee as may be specified in the financial responsibility instrument or if none, upon reasonable notice.

33. The Permittee shall notify the District by certified mail within 10 days of the commencement of a voluntary or involuntary proceeding:

A. To dissolve the Permittee;
B. To place the Permittee into receivership;
C. For entry of an order for relief against the Permittee under Title XI (Bankruptcy), U.S. Code.
D. To assign of the Permittee's assets for the benefit of its creditors under Chapter 727, Florida Statutes.

34. In the event of bankruptcy or insolvency of the issuing institution; or the suspension or revocation of the authority of the issuing institution to issue letters of credit or performance bonds, the Permittee shall be deemed without the required financial assurance and shall have 60 days to reestablish the financial assurance required by Rule 40D-4.301(1)(j), Florida Administrative Code.

35. Construction is prohibited until the District receives and approves a complete Construction Surface Water Management Plan for the project area. Three copies of the plan must be submitted after they are signed by the Permittee/Owner or the Permittee/Owner's authorized agent, and signed and sealed by the design engineer.

36. This permit is issued based upon the design prepared by the Permittee's consultant. If at any time it is determined by the District that the Conditions for Issuance of Permits in Rules 40D-4.301 and 40D-4.302, F.A.C., have not been met, upon written notice by the District, the Permittee shall obtain a permit modification and perform any construction necessary thereunder to correct any deficiencies in the system design or construction to meet District rule criteria. The Permittee is advised that the correction of deficiencies may require re-construction of the surface water management system and/or mitigation areas.

37. To mitigate for 57.56 acres of wetlands and 5.52 acres of surface waters requiring habitat mitigation, the Permittee will establish regionally significant mitigation within the Alston Tract adjacent to District land (Upper Hillsborough) and create 14.8 acres of wetland, enhance 45.7 acres of wetlands and 42.6 acres of uplands, and preserve 38.7 acres of wetlands and 106.7 acres of uplands via a dedicated conservation easement to the District. The Functional Gain of the mitigation was determined to be 63.28 units. Since the Functional Gain of the mitigation is greater than the 39.87 units of Functional Loss, the wetland and surface water impacts are offset by the mitigation.

38. The excess Functional Gain identified in this permit from the Alston Mitigation Tract is not available for future applications.

39. The District is not, by this authorization, approving any proposed future wetland or surface water impact, roadway alignments, or lot configurations in other phases. When applications for future phases or road alignments are submitted, the District will evaluate the quality of the wetland or surface water being impacted and the proposed mitigation.

40. No construction under this Permit is authorized unless the following documents are received and approved by the District: Title Insurance and an executed and recorded Conservation Easement in favor of the District that appropriately covers the wetland and upland areas within the Alston Mitigation Tract shall be submitted within 90 days of Permit issuance.

41. The Permittee will develop and submit a plan to monitor and maintain the wetland buffers and wet detention ponds for review and approval by the District prior to commencement of activities in the buffer zone.

42. For the Alston Mitigation Tract, the Permittee will provide a specific schedule of tasks (herbicide application, disking, application of mulch and planting of containerized stock, etc.) within 90 days of permit issuance.

43. The Permittee shall monitor and maintain the temporarily disturbed wetland areas resulting from the hand excavation of discharge swales in the Alston Mitigation Tract until satisfactory re-vegetation with desirable native wetland plant species is achieved.

44. The Permittee shall submit the executed conservation easement, as recorded in the County Public Records, to the District within 90 days of permit issuance. Conservation easements shall identify the District as the grantee and shall cover the following areas: Wetland Preservation Area 1 - 33.8 acres; Wetland Preservation Area 2 - 4.9 acres; Upland Preservation Area 1 - 71.0 acres; Upland Preservation Area 3 - 35.7 acres. The Permittee shall receive approval from the District for any proposal to modify the conservation easement prior to conducting any activity prohibited by the terms of the conservation easement.

45. The Permittee shall, within 48 months of initial wetland impact and prior to beneficial use of the site, complete all aspects of the mitigation plan, including the grading, mulching, and planting, in accordance with the design details in the final approved construction drawings.

46. The maximum impervious area for Basin 505002 (Pond C) is 44.8 acres which is equivalent to 83% impervious area within the developable basin area. Any additional proposed impervious area above 44.8 acres will require a formal permit modification.

47. The maximum impervious area for Basin 504002 (Pond E) is 37.49 acres which is equivalent to 79% impervious area within the developable basin area. Any additional proposed impervious area above 37.49 acres will require a formal permit modification.

GENERAL CONDITIONS

1. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.

Authorized Signature

EXHIBIT "A"

1. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

3. For general permits authorizing incidental site activities, the following limiting general conditions shall also apply:

   a. If the decision to issue the associated individual permit is not final within 90 days of issuance of the incidental site activities permit, the site must be restored by the permittee within 90 days after notification by the District. Restoration must be completed by re-contouring the disturbed site to previous grades and slopes re-establishing and maintaining suitable vegetation and erosion control to provide stabilized hydraulic conditions. The period for completing restoration may be extended if requested by the permittee and determined by the District to be warranted due to adverse weather conditions or other good cause. In addition, the permittee shall institute stabilization measures for erosion and sediment control as soon as practicable, but in no case more than 7 days after notification by the District.

   b. The incidental site activities are commenced at the permittee's own risk. The Governing Board will not consider the monetary costs associated with the incidental site activities or any potential restoration costs in making its decision to approve or deny the individual environmental resource permit application. Issuance of this permit shall not in any way be construed as commitment to issue the associated individual environmental resource permit.

4. Activities approved by this permit shall be conducted in a manner which does not cause violations of state water quality standards. The permittee shall implement best management practices for erosion and a pollution control to prevent violation of state water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

5. Water quality data for the water discharged from the permittee's property or into the surface waters of the state shall be submitted to the District as required by the permit. Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency. If water quality data are required, the permittee shall provide data as required on volumes of water discharged, including total volume discharged during the days of sampling and total monthly volume discharged from the property or into surface waters of the state.

6. District staff must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters, a written dewatering plan must either have been submitted and approved with the permit application or submitted to the District as a permit prior to the dewatering event as a permit modification. A water use permit may be required prior to any use exceeding the thresholds in Chapter 40D-2, F.A.C.

7. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceased.

8. Off-site discharges during construction and development shall be made only through the facilities authorized by this permit. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operating schedules satisfactory to the District.

9. The permittee shall complete construction of all aspects of the surface water management system, including wetland compensation (grading, mulching, planting), water quality treatment features, and discharge control facilities prior to beneficial occupancy or use of the development being served by this system.

10. The following shall be properly abandoned and/or removed in accordance with the applicable regulations:

    a. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed well contractor.
    b. Any existing septic tanks on site shall be abandoned at the beginning of construction.
    c. Any existing fuel storage tanks and fuel pumps shall be removed at the beginning of construction.

11. All surface water management systems shall be operated to conserve water in order to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property and to minimize dewatering of offsite property.

12. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District a written notification of commencement indicating the actual start date and the expected completion date.

13. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the occupation of the site or operation of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to a local government or other responsible entity.

14. Within 30 days after completion of construction of the permitted activity, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C. Additionally, if deviation from the approved drawings are discovered during the certification process the certification must be accompanied by a copy of the approved permit drawings with deviations noted.

15. This permit is valid only for the specific processes, operations and designs indicated on the approved drawings or exhibits submitted in support of the permit application. Any substantial deviation from the approved drawings, exhibits, specifications or permit conditions, including construction within the total land area but outside the approved project area(s), may constitute grounds for revocation or enforcement action by the District, unless a modification has been applied for and approved. Examples of substantial deviations include excavation of ponds, ditches or sump areas deeper than shown on the approved plans.

16. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the conditions herein, the District determines the system to be in compliance with the permitted plans, and the entity approved by the District accepts responsibility for operation and maintenance of the system. The permit may not be transferred to the operation and maintenance entity approved by the District until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall request transfer of the permit to the responsible operation and maintenance entity approved by the District, if different from the permittee. Until a transfer is approved by the District, the permittee shall be liable for compliance with the terms of the permit.

17. Should any other regulatory agency require changes to the permitted system, the District shall be notified of the changes prior to implementation so that a determination can be made whether a permit modification is required.

18. This permit does not eliminate the necessity to obtain any required federal, state, local and special District authorizations including a determination of the proposed activities' compliance with the applicable comprehensive plan prior to the start of any activity approved by this permit.

19. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40D-4 or Chapter 40D-40, F.A.C.

20. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the activities authorized by the permit or any use of the permitted system.

21. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.

22. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rule 40D-4.351, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.

23. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with District rules, regulations and conditions of the permits.

24. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the District and the Florida Department of State, Division of Historical Resources.

25. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

ATTACHMENT 3

MITIGATION PLAN

Mitigation Plan Overview

The mitigation plan for the Cypress Creek Town Center (CCTC) includes both on-site and off-site components (see Exhibit 1 for location map). Impacted wetlands will be mitigated consistent with the requirements of Chapter 373, F.S. and Section 40D-4 of the Florida Administrative Code (F.A.C); Section 404 of the Clean Water Act; and Section 3, Objective 2.7 of the Pasco County Comprehensive Plan. Wetland mitigation will consist of a combination of wetland enhancement, restoration, creation and preservation as well as upland restoration and preservation. The Unified Mitigation Assessment Method (UMAM) was used to quantify the functional value of both the impact sites and the proposed mitigation in order to assure that the mitigation proposed will provide at least as much functional value as was provided by the wetlands and surface waters that will be filled.

The on-site component of the plan consists of wetland creation. Three wetlands (M-1, M-2 and M-3) will be created in the southern part of the site (Exhibit 2). These locations were chosen because they are hydrologically appropriate and in close proximity to existing wetlands. The wetlands will be created by scraping down existing topography and planting with appropriate wetland plants. Details of the mitigation are in the sections which follow.

The Alston Mitigation Site will provide a regionally significant off-site mitigation location. The mitigation site is located within the Hillsborough River basin and is surrounded on three sides by publicly owned lands. SWFWMD owns the lands to the south, east and north sides of the site (SWFWMD's Upper Hillsborough Site). For clarity, the mitigation site is referenced throughout this document as the "Alston Mitigation Site."

The off-site component of the mitigation (Alston Mitigation Site, Exhibit 3) was chosen based largely on its regional significance and the potential to enhance, restore, and create wetland habitats that will provide improved functions and values relative to those to be impacted. The Alston Mitigation Site is a 249.1-acre tract of land located within the Hillsborough River Basin that is adjacent to conservation lands owned and managed by the Southwest Florida Water Management District (Exhibit 4). It is located in the southeastern corner of Pasco County. As part of the mitigation for this project, the Developer will create, restore, enhance, and preserve wetlands; restore and preserve uplands; and provide management of both uplands and wetlands on the tract in perpetuity. The proposed ecosystem improvement plan will result in increased acreage and improved functions and values of wetlands on the site (Exhibit 4). Details of the plan are presented in the sections which follow.

The activities proposed for the Alston Mitigation Site are a large-scale ecosystem enhancement/restoration effort that includes the enhancement/restoration of wet pasture to wetlands, hydrological and structural habitat enhancement of dewatered wetlands, restoration of mesic pasture to flatwoods, and upland preservation coupled with ecologically sound management.

In summary, the hydrological enhancement/restoration will consist of removing the effects of an extended history of localized ditching and rerouting of water and the clearing of a forested slough which increased the speed of water movement across the site resulting in some channelization in areas that were historically sheet flow. The hydrological enhancement/restoration will consist of the placing of control structures and berms in strategic locations to restore the historical pattern of water flow. Low berms will be installed to detain water in the slough and in existing "pasture wetlands" such that existing wetlands have a more reliable and longer hydroperiod and portions of the pasture that currently would be classified as uplands will be inundated or saturated at a frequency and duration sufficient to be

classified as COE jurisdictional wetlands. All control structures will be designed so that fish can swim between wetlands at high water.

The enhancement and expansion of wetlands in the pasture depends on lengthening of the hydroperiods in those areas. This will be accomplished by restricting water flow at the road crossing in the upstream portion of a slough just south of the pasture area. Currently, water flows north under a road through a large, artificially broadened culvert and ditch. A structure has been designed to control water flow so that during periods of high water, less water will flow at the base of the structure and water will be impounded in the upstream wetland (currently dewatered) until it flows over the top of the structure. This impoundment, coupled with removing fill from a historic low area in the existing roadway further east, will shunt water to the east to another historic overflow area during periods of high water. During low water periods, water will continue to flow only in the slough as occurs currently. During high water, the eastern overflow will direct water across a low area in what is now pasture and rehydrate an existing degraded cypress wetland in the pasture, thus rehydrating this wetland and expanding it into the pasture. Down-grade and west of this cypress wetland, a low berm will be constructed to block a shallow ditch that drains this cypress wetland. This berm will further retard flow resulting in a longer hydroperiod in the existing cypress wetland and also raising the water table in the much of the pasture This will create a broad area with hydrology appropriate to savanna-like wet prairie ("wetland savanna"). The wetland savannah will have a short hydroperiod but will be saturated for much of the growing season. In addition to the above, a wetland in the southern wooded part of the site will be enhanced by filling in a ditch that currently drains it.

Both wetlands and uplands within the pasture area will be enhanced. The enhancement procedure consists of removal of existing sod (mostly bahia grass, Bermuda brass, and torpedo grass), and seeding with a mix of native seed, that will be harvested from a donor site that has been managed via a controlled burn and selectively augmented with hand gathered wetland seed. Following establishment of the seed, selective planting will be done to return the existing slough (which consists now largely of a wet pasture) back to forested wetland, to provide additional diversity to other wetlands in the pasture, and to introduce appropriate native shrubs and trees that are not in the seed mix to both wetland and upland areas. Overall, the enhancement procedure will be similar to the type of enhancement currently used by public land management agencies to set degraded pasture areas on a path that will lead to more natural ecosystems and high wildlife value.

The organization of this document follows the checklist provided by the US Army Corps of Engineers in its May 24, 2004 Public Notice: Mitigation and Monitoring Guidelines.

1) Mitigation Goals and objectives

Impact Site

a) Describe and quantify the aquatic resource type and function that will be impacted at the proposed impact site. Include temporary and permanent impacts to the aquatic environment.

Wetlands on the Cypress Creek Town Center have been delineated in accordance with both State (Chapter 62-340, F.A.C.) and Federal (1987 US Army Corps of Engineers Wetland Delineation Manual) methodologies. Wetland boundaries and hydroperiods have been field verified by the US Army Corps of Engineers. All wetlands on the property are shown in Appendix A, Figure 8.

Wetlands on the property consist primarily of logged cypress (*Taxodium ascendens*) heads and sloughs, a few isolated marsh systems, and a few man-made surface waters. Cypress Creek forms the southern boundary of the project site but is not within the boundaries of the site.

Uplands

Uplands on the site consist of bahia grass (*Paspalum notatum*) pasture with a small amount of oak (*Quercus virginiana, Q. laurifolia, Q. nigra*) hammock located on the south end of the property, mostly in the area bordering Cypress Creek. There are a few scattered live oaks present within the pasture. However, in general, the uplands on the property do not provide any significant wildlife habitat value.

Wetland Impact Area Descriptions

A map of the impact areas is given in Appendix A, Figure 8. This map includes all areas considered jurisdictional under either federal or state wetland delineation criteria. Areas not meeting federal wetland jurisdictional criteria are indicated as "Non-COE Jurisdictional." Only those areas meeting federal wetland jurisdictional criteria are included in the impact discussions below.

Wetland Impact Area W-A

Wetland Impact Area W-A is a large semi-forested wetland located in the center of the property just north of SR56. This wetland was historically forested but has been logged. Approximately half of the wetland consists of a young forest which is approximately half cypress (*Taxodium ascendens*) and half red maple (*Acer rubrum*). There is a distinct area located at the south end of the wetland adjacent to SR56 that is dominated by two species: Peruvian primrose-willow (*Ludwigia peruviana*) and softrush (*Juncus effusus*). This area has been heavily trampled by cattle. Water quality in the wetland at the time of the assessment appeared to be very poor based on high turbidity and a brown color to the water. The herbaceous cover in the wetland is fairly diverse. The most common species are pickerelweed (*Pontederia cordata*), fireflag (*Thalia geniculata*), marsh pennywort (*Hydrocotyle umbellata*), lizard's-tail (*Saururus cernuus*), and horned beakrush (*Rhynchospora inundata*). Other species in the wetland include sawgrass (*Cladium jamaicense*), Virginia chain fern (*Woodwardia virginica*), swamp fern (*Blechnum serrulatum*), climbing aster (*Symphyotrichum carolinianum*), smartweed (*Polygonum hydropiperoides*), lance-leaved arrowhead (*Sagittaria lancifolia*), and cattail (*Typha latifolia*).

There is also a significant cover of floating species, mostly mosquito fern (*Azolla caroliniana*) and water spangles (*Salvinia minima*). The existing hydrology appears to be adequate to maintain wetland function. Water quality in the remaining portions of the wetland (those areas not adjacent to SR56) appears to be good. Its proximity to SR56, which is approximately 20 feet higher then the natural grade, restricts access by wildlife to the wetland. The surrounding upland habitat is improved pasture.

Wetland Impact Area W-A2

Wetland Impact Area W-A2 is a historic flow-way located in the southwest corner of the northern portion of the property. It connects Wetland Areas W-A and W-J. Based on historic aerial photography, it appears to have been a shallow herbaceous flow-way. Currently the area consists of a deep steep-sided channel. The surrounding wetlands have been severely dewatered and also heavily grazed and trampled for many years by cattle. The wetland is dominated by softrush and Peruvian primrose-willow. Other species present in the wetland blackberry (*Rubus argutus*) and broomsedge (*Andropogon* spp.). Shrub cover is less than 10 percent and is dominated by wax myrtle (*Myrica cerifera*) and saltbush (*Baccharis* sp.). This wetland is in a highly degraded condition. It is also located very near SR56, which further decreases its wildlife habitat value.

Wetland Impact Areas W-A1 and W-A3

These are two areas which have been excavated to provide fill for a farm road under a powerline. Vegetation consists of buttonbush (*Cephalanthus occidentalis*), coastal-plain willow (*Salix caroliniana*) and pickerelweed (*Pontederia cordata*).

Wetland Impact Area W-H

Wetland Impact Area W-H is located just north of Wetland Impact Area W-I. Historically, this wetland was an oval-shaped cypress head. The western half of the wetland was filled to construct CR54. The wetland has been logged and is now a marsh. Trees are only present on the fringe of the wetland and consist primarily of red maple and cypress. The center is dominated by pickerelweed (approximately 80 percent cover); however, the wetland has a fairly high diversity of herbaceous species. The most common other species present are softrush, horned beakrush, and mermaid-weed (*Proserpinaca palustris*). Other species present in small amounts include swamp fern (*Blechnum serrulatum*), red maple seedlings, dog fennel (*Eupatorium capillifolium*), goldenrod, swamp azalea (*Rhododendron viscosum*), Peruvian primrose-willow, and broomsedge (*Andropogon virginicus*). There is also approximately 20 percent cover of bladderwort (*Utricularia* sp.). Shrub cover consists of approximately 10 percent cover and is dominated by wax myrtle. Scattered fetterbush (*Lyonia lucida*) is also present. The wetland receives untreated roadway runoff and has been cut off from much of its historic basin. Access for wildlife has been limited by the construction of CR54 and the surrounding habitat is bahia grass pasture.

Wetland Impact Area W-J

Wetland Impact Area W-J is a large, herbaceous wetland located in the northwest corner of the south half of the property. This historic cypress wetland has been logged and is currently dominated by wax myrtle, saltbush, red maple saplings and cypress saplings. The wetland likely will become a red maple swamp over time. The most common herbaceous species is softrush. However, other common species include blackberry (*Rubus argutus*), Peruvian primrose-willow, pickerelweed, softrush, and pale meadow-beauty (*Rhexia mariana*). Species present in smaller amounts include coinwort, pennywort, mermaid-weed, climbing hempweed (*Mikania scandens*), dog fennel, smartweed, mock bishop's-weed (*Ptilimnium capillaceum*), and lizard's-tail. The existing hydrology in the wetland appears to be adequate to maintain function.

Wetland Impact Area W-L

This wetland was historically contiguous to Wetland Impact Area W-A (located on the north side of SR56). This wetland has been heavily disturbed by logging and heavy cattle use. Many cattle trails exist and species composition is indicative of heavy cattle grazing. The dominant herbaceous species are softrush and maidencane. Mosquito fern and water spangles are dominate floating species. These species are indicative of disturbance, specifically high nutrient loading. The center of wetland is dominated by a combination of Peruvian primrose-willow (which accounts for approximately 75 percent cover in the understory) and coastal-plain willow in the overstory (accounting for approximately 50 percent cover in the center of the wetland). Other herbaceous species common in the wetland as five percent cover or less include climbing aster, shield fern (*Thelypteris* sp.), cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regalis*), catbriar (*Smilax laurifolia*), and netted chain fern (*Woodwardia areolata*). Shrub cover is dominated by wax myrtle and coastal-plain willow. There is also a small amount of sweetspire (*Itea virginica*) present.

Wetland Impact W-L1

This is a highly disturbed area located directly adjacent to SR56. It is dominated by nearly 100 percent cover of softrush. Access to wildlife is highly limited by SR56 and by fences. It has been hydrologically isolated from Wetland W-A (to the north) and Wetland W-L (to the south).

Wetland Impact Area W-O

Wetland Impact Area W-O is a small, circular, historically isolated marsh located in the southeast corner of the southern portion of the property. A ditch, which was excavated in hydric soils, extends to the south from the wetland towards Wetland W-P; however, the two wetlands do not connect. This wetland is dominated by spatterdock (*Nuphar advena*). Three other species are common including softrush, spike-rush, and pickerelweed. Others species present include yellow-eyed-grass (*Xyris* sp.), grass-leaf rush, broomsedge, coinwort, and pennywort. The wetland is heavily grazed and somewhat dewatered.

Temporary Impact Areas (W-L2, W-P1, W-P2)

There are several very small, temporary impact areas near the outfalls of surface water management ponds. These areas have areas less than 0.01 ac and have been lumped in the analyses with areas that are similar in character. They are not shown on the maps since they are so small that they would fall under the lines used to draw the wetland limits. They have been included in the UMAM analyses.

Surface Water Impact Areas

Surface Water Impact Area W-N.

This is the deepest of several surface waters created during the excavation of fill for the construction of I-75. The shallower areas are vegetated with pickerelweed and softrush. The deeper portions have about 20 percent cover of white water lily (*Nymphaea odorata*).

Surface Water Impact Area W-U

This is a shallow transitional area that resulted from the excavation for fill described for Surface Water W-N. Dominant species in the area include pennywort, coinwort, carpetgrass (*Axonopus* sp.), yellow-eyed-grass, spike-rush, broomsedge, coinwort, pennywort, and grass-leaf rush (*Juncus marginatus*).

Other Surface Waters

Several other small surface waters exist but were not considered to provide wetland functions. These include several agricultural ditches, a cattle pond, and small depressional areas within the excavated area described above.

b) Describe aquatic resource concerns in the watershed (e.g. flooding, water quality, habitat) and how the impact site contributes to overall watershed/regional functions. Identify watershed or other regional plans that describe aquatic resources.

At Corps request, a detailed analysis of water resource concerns at the impact site was conducted and provided within the Cumulative Impact analysis for the project. This analysis is included as Appendix F. The Applicant is unaware of any regional plan that would provide a more in-depth analysis than that provided in Appendix F.

Mitigation Sites

c) Describe and quantify the aquatic resource type and functions for which the mitigation project is intended to compensate.

The mitigation sites are intended to compensate for losses of wetland functions. The on-site mitigation areas provide local replacement of lost wetland acreage and functions, and, together with planting of littoral shelves in surface water management ponds, provide for nearly 2:1 replacement of potential wood stork and other wading bird foraging habitat.

Mitigation will be provided by a combination of on-site wetland creation; off-site wetland restoration, creation and enhancement; and upland ecosystem preservation and management. Proposed compensation is being provided in terms of UMAM functional loss and lift units. Total COE jurisdictional wetland impacts associated with the project are 53.89 acres. An additional 9.65 acres of jurisdictional man made surface waters will also be filled. The total functional loss for the filling of wetlands and surface waters is 38.69 functional units.

The function lift has been computed to be 38.90 units for all wetland specific mitigation activities (wetland creation, enhancement and preservation). In addition, the 129.9 acres of upland restoration/enhancement and upland preservation on the Alston property result in 58.9 units of functional lift. See the UMAM analysis (Appendix B) for detail.

The offsite mitigation area (Alston Mitigation Site) can be described as a large-scale ecosystem enhancement/restoration and management effort that includes the enhancement/restoration of wet pasture to wetlands, hydrological enhancement of dewatered wetlands, restoration of mesic pasture to flatwoods, and upland preservation coupled with ecologically sound management. The mitigation activities will provide more functional improvement in wetland size and quality to offset the loss of wetland functions than required under SWFWMD and US Army Corps of Engineers (COE) regulations as determined by the Florida Uniform Mitigation Assessment Method (UMAM). In specific, the Alston Mitigation site provides for 1) enhancement of wetlands with hydrological and vegetative degradation, 2) creation of "savanna" wetlands that meet federal wetland criteria (saturation to the surface) and that regionally have suffered greater proportional losses than deeper wetland systems, 3) restoration of degraded uplands that form important buffers protective of water quality and habitat, 4) management and preservation of uplands and wetlands important to the maintenance of ecosystem and watershed functions, and 5) expansion of existing protected habitats via conservation easements and enhancement/restoration/creation activities.

d) Describe the contribution to overall watershed/regional functions that the mitigation site(s) is intended to provide.

Please see the above response.

2) Baseline information – for proposed impact site, proposed mitigation site & if applicable, proposed reference site(s).

a) Location

1) Coordinates (preferably using DGPS) & written location description (including block, lot, township, county, Hydrologic Unit Code (HUC) number, as appropriate and pertinent.

Impact Site and On-Site Mitigation Area

The Cypress Creek Town Center Project is located within Section 27, Township 26 South, Range 19 East in Pasco County, Florida. The latitude is 28° 11' 49.55" N and the longitude is 82° 23' 32.32" W. The site is located at the intersection of Interstate 75 (I-75) and State Road 56 (SR56) and State Road 54 (SR54), on the west side of I-75 and bisected by SR56. The Project can be accessed by driving north on I-75 from Tampa, exiting at SR56, and turning west. The project extends on both sides of the road west of the I-75 entrance and exit ramps.

Off-Site Mitigation Site

Appendix A includes maps of the project location and the Alston Mitigation Site. The Alston Mitigation Site is located in Sections 28 and 33, Township 26 South, Range 22 East, in Pasco County, Florida. The latitude is 28° 10' 46.42" N and the longitude is 82° 06' 28.96" W. It is in the southeastern corner of Pasco County. It can be reached by driving north from I-4 at Plant City on CR 39 to County Line Road, turning east on County Line Road, north on Saunders Road, and east on Deems Road to the end at which point it turns into a private drive into property owned by Mr. Brad Alston. The mitigation site itself is accessed from the main road through the Alston property by driving east until crossing the altered slough. Please refer to the location map in Appendix A, Figure 23.

2) Maps (e.g. site map with delineation (verified by the Corps), map of vicinity, map identifying location within the watershed, NWI map, NRCS soils map, zoning or planning maps; indicate area or proposed fill on site map).

See Appendix A, Figure 6 for a wetland delineation map of the impact site. The delineation line shown was approved by the Corps. See Appendix A, Figure 25 for a delineation of wetlands on the Alston Mitigation Site. The delineation line shown for the Alston Mitigation Site was approved by the SWFWMD.

3) Aerial/Satellite photos.

See Appendix A, Figures 3 and 24 for on-site aerial photographs of the impact and mitigation sites.

b) Classification – Hydrogeomorphic as well as Cowardian classification, Rosgen stream type, NRCS classification, as appropriate.

Impact Site (not all wetlands in the table are to be impacted)

Wetlands are identified in the table as shown in Appendix A, Figure 6.

Wetland	Acreage	FLUCFCS	Cowardin Classification
W-A	35.32	621	Palustrine, scrub-shrub
W-A1	13.65	621	Palustrine, scrub-shrub
W-A2	.84	500, 641	Palustrine, emergent
W-C	.20	641	Palustrine, emergent
W-D	.43	641	Palustrine, emergent
W-D1 - ditch	.12	500	Palustrine, emergent
W-E	9.50	621	Palustrine, scrub-shrub
W-E1	.72	641	Palustrine, emergent
W-F	.30	530	Palustrine, emergent
W-H	3.73	641	Palustrine, emergent
W-J	24.29	621	Palustrine, scrub-shrub
W-J1	.04	643	Palustrine, emergent
W-K – borrow pond	3.83	530	Palustrine, emergent
W-L	25.74	621	Palustrine, scrub-shrub
W-L1	1.46	641	Palustrine, emergent
W-N– borrow pond	4.43	530	Palustrine, emergent
W-O – marsh with ditch	.82	641, 500	Palustrine, emergent
W-P	33.18	621	Palustrine, scrub-shrub
W-R	5.01	643	Palustrine, emergent
W-S	.22	641	Palustrine, emergent
WT– borrow pond	.18	530	Palustrine, emergent
W-U	1.09	530	Palustrine, emergent

In the FLUCFCS system, 621 is a cypress dominated wetland. In this case, all are recently logged so classified in the Cardin system as Palustrine, scrub-shrub. FLUCFCS 641 and 643 are emergent marshes with 641 being deeper than 643. Artificial wetlands include FLUCFCS 500 (ditches) and FLUCFCS 530 (borrow ponds). See Section 1 for wetland impact area descriptions.

Alston Mitigation Site

Wetlands are mapped according to type on the Alston mitigation site as shown in Appendix A, Figure 29. In the table below, the areas are named and described as they are on the figure and given classifications in accordance with their current (not future) condition. Wetlands to be created are not included in the table.

Wetlands	Acreage	FLUCFCS	Cowardin Classification
Wetland Enhancement 1 (historic slough)	4.2	641/643	Palustrine, emergent
Wetland Enhancement 3 (marshes in existing pasture)	7.9	641/643	Palustrine, emergent
Wetland Enhancement 4 (marshes with pasture on one side and SWFWMD land on the other	1.4	641/643	Palustrine, emergent
Wetland Enhancement 5 (cypress wetlands located in existing pasture)	3.80	621	Palustrine, forested
Wetland i 8 (ditched/dewatered cypress wetland)	2.9	621	Palustrine, forested
Wetland 9 (dewatered cypress wetland surrounded by flatwoods)	25.5	621	Palustrine, forested
Wetland Preservation 1 (mixed forested wetlands)	33.8	621/630	Palustrine, forested
Wetland Preservation 2 (marshes surrounded by flatwoods	4.9	641/643	Palustrine, emergent

c) Quantify wetland resources (acreage) or stream resources (linear feet) by type(s).

See tables above.

d) Assessment method(s) used to quantify impacts to aquatic resource functions (e.g., HGM, IBI, WRAP, etc.); explain findings. The same method should be used at both impact and mitigation sites.

Impact Site

Wetlands on the CCTC site were assessed using the Florida Unified Wetland Mitigation Assessment Methodology and the assessment has been reviewed by Tracy Hurst of the Corps. Wetlands to be created on-site and all mitigation areas on the Alston Mitigation site were assessed using the same methodology. See Appendix B for detail.

Mitigation Sites

Wetlands on the Mitigation Sites were assessed using the Florida Unified Wetland Mitigation Assessment Methodology. Care was taken that the assessment be consistent with the mitigation of the impact sites. See Appendix B for detail.

e) **Existing hydrology**

1) **Water budget. Include water source(s) (precipitation, surface runoff, groundwater, stream) and losses(s). Provide budgets for both wet and dry years.**

Impact Site and On-Site Mitigation Area

Ardaman and Associates, Inc. conducted a groundwater investigation on the impact site that included an evaluation of the water budget especially as it relates to the surface water management system and wetlands on the property. Excerpts from that report are provided in Appendix H. Overall, the report shows that the surface water management system on the property should appropriately and adequately maintain the water balance of wetlands on the site.

Alston Mitigation Site

The water budget of the off-site mitigation area (Alston Mitigation Site) will not be altered from that currently present. What will be altered is existing ditches and blockages to flow which will be removed or converted into control structures and low berms that will increase existing hydroperiods in areas that are currently altered. The contributing drainage area will not be altered. No water quality analyses have been conducted, but since the site has been used only as pasture, the primary pollutants anticipated are those contributed by cattle and various wildlife. Since cattle will be removed and the restoration area will be fenced to exclude both cattle and hogs, water quality will be improved.

2) **Hydroperiod (seasonal depth, duration and timing of inundation and/or saturation), percent open water.**

Impact Site and On-Site Mitigation Area

Wetlands on the impact site vary in terms of hydroperiod and depth. Based on conditions observed on the site, the typical on-site wetland has a hydroperiod of approximately 9 months and is approximately 2 feet deep in the center. No natural wetlands have open water.

Ardaman and Associates, Inc. conducted a groundwater investigation on the site that included an evaluation of the water budget especially as it relates to the surface water management system and wetlands on the property. Excerpts from that report are provided in Appendix H. Overall, the report shows that the surface water management system on the property should appropriately and adequately maintain the hydroperiods of wetland on the site.

Alston Mitigation Site

The mitigation wetlands on the Alston Mitigation Site vary in hydroperiod. Most wetlands south of the pasture have hydroperiods of approximately 6 to 9 months but greater fluctuation due to alterations. These wetlands appear to have a reduced hydroperiod compared to the historic condition based on observed fire scars and invasion by facultative and facultative upland plant species into the wetlands. In particular, portions of the wetlands south of the pasture have

had the transitional zones colonized by bahia grass and laurel oaks. Natural depth of these wetlands is approximately 2 ft, greater in impounded areas.

Wetlands within the area to be restored have hydroperiods that appear, based on indicators, to be approximately 6-7 months in forested systems and much less in herbaceous systems. There is no history of hydrological data, so the best evidence includes stain lines, lichen lines, and adventitious roots.

Wetlands in the preservation areas appear to have relatively normal to slightly shortened hydroperiods estimated to be approximately 7-9 months.

3) Historic hydrology of mitigation site if different than present condition.

Historically, wetlands on the Alston Mitigation site would have had long hydroperiods. Forested wetlands would have had approximately 9 month hydroperiods. The slough system would have varied from year to year from being a stream to being totally dry depending on rainfall. The herbaceous wetlands would have varied from relatively long hydroperiod systems (likely 9 months or more) to very short hydroperiod systems. The savannas would rarely have been inundated but would have been saturated to the surface for several months each year.

4) Contributing drainage area (acres).

The principal contributing drainage area is shown on Appendix A, Figure 31. It includes 255.2 acres.

5) Results of water quality analyses (e.g., data on surface water, groundwater, and tides for such attributes as pH, redox, nutrients, organic content, suspended matter, DO, heavy metals).

Impact Site and On-Site Mitigation Area
A surface water quality report is provided in Appendix G. Appendix F includes an assessment of water quality in Cypress Creek, the only area for which long term information is available.

Alston Mitigation Site

No water quality studies have been conducted for this area. Based on land uses (pasture and wetlands surrounded by flatwoods), generally good water quality is anticipated. DO (dissolved oxygen) and nutrient levels could be somewhat high due to the presence of domestic animals.

f) Existing vegetation

1) List of typical wetland species on site, indicating dominants. (D=dominant in one or more wetlands, *=present)

Impact Site only (On-Site Mitigation Areas are currently uplands, the species list is for existing wetlands)

Table 2-1. Existing vegetation in on-site wetlands.

Species	Forested Palustrine	Non-forested Palustrine
Acer rubrum	D	
Andropogon glomeratus		*
Andropogon virginicus		*
Axonopus spp. (non-native)		*
Azolla caroliniana (non-native)	*	*
Baccharis halimifolia	*	*
Centella asiatica	*	*
Cephalanthus occidentalis	*	
Eichhornia crassipes (non-native, nuisance)	*	*
Eupatorium capillifolium	*	*
Hydrocotyle umbellata		*
Hyptis alata		*
Juncus effusus		D
Juncus marginatus		*
Juncus sp.	*	*
Itea virginica	*	
Ludwigia peruviana (non-native, nuisance)	D	*
Ludwigia repens	*	
Lyonia lucida	*	
Mikania scandens	*	*
Myrica cerifera	*	
Nuphar advena		*
Nymphaea odorata		*
Nyssa sylvatica var. *biflora*	*	*
Osmunda cinamomea	*	
Osmunda regalis	*	
Panicum hemitomon		*
Panicum repens (non-native, nuisance)	*	*
Paspalum notatum (non-native, nuisance)		*
Polygonum hydropiperoides	*	*
Pontederia cordata	*	*

Species	Forested Palustrine	Non-forested Palustrine
Proserpinaca palustris		*
Ptilimnium capillaceum		*
Quercus laurifolia	*	
Quercus nigra	*	
Rhexia mariana		*
Rhododendron viscosum	*	
Rhynchospora inundata	*	
Rhynchospora sp.	*	*
Rubus argutus (native, not desirable)	*	*
Sagittaria graminea	*	*
Sagittaria lancifolia	*	
Sarurus cernuus	*	*
Salix caroliniana	*	
Salvinia minima (non-native)	*	
Solidago fistulosa		*
Symphiotrichum carolinianum	*	
Taxodium ascendens	D	*
Taxodium distichum	*	
Thalia geniculata	*	
Thelypteris sp.	*	
Typha sp. (native, not desirable)	*	D
Utricularia sp.	*	*
Woodwardia aereolata	*	
Woodwardia virginica	*	
Xyris elliottii	*	*
Xyris sp.	*	

Table 2-2. Existing pre- and post-restoration vegetation in off-site Alston Mitigation Site Wetlands.

Species	Forested Palustrine		Non-forested Palustrine	
	Pre	Post	Pre	Post
Acer rubrum	*	*		
Andropogon glomeratus			*	*
Andropogon virginicus			*	*
Axonopus sp.			*	*
Axolla caroliniana (non-native)	*			
Baccharis halimifolia	*	*		
Blechnum serrulatum	*	*		
Centella asiatica	*	*	*	*
Cephalanthus occidentalis	*	*	*	*

Species	Forested Palustrine		Non-forested Palustrine	
	Pre	Post	Pre	Post
Eichhornia crassipes (non-native, nuisance)	*		*	
Eupatorium capillifolium	*		*	
Hydrocotyle umbellata	*	*	*	*
Juncus effusus	*	*	D	*
Juncus marginatus	*	*	*	*
Juncus sp.	*	*	*	*
Ilex cassine	*	*		
Itea virginica	*	*		
Ludwigia repens	*	*	*	*
Lycopus rubellus	*	*		
Lyonia lucida	*	*		
Micranthemum sp.			*	*
Mikania scandens	*	*		
Myrica cerifera	*	*		
Nymphaea odorata		*		
Nyssa sylvatica var. *biflora*	*	*		*
Osmunda cinamomea	*	*		
Osmunda regalis	*	*		
Panicum hemitomon			*	*
Panicum repens (non-native, nuisance)	*		D	
Paspalum notatum (non-native, nuisance)	*		D	
Polygonum hydropiperoides	*	*	D	*
Pontederia cordata	*	D	*	D
Proserpinaca palustris			*	*
Ptilimnium capillaceum			*	*
Quercus laurifolia	*	D		
Quercus nigra	*	*		
Rhexia mariana			*	*
Rhododendron viscosum	*	*		
Rhynchospora inundata		*		
Rhynchospora sp.	*	*	*	*
Rubus argutus (native, not desirable)	*			
Sagittaria graminea	*		*	*
Sagittaria lancifolia	*	D		D
Sarurus cernuus	*	*		*
Salix caroliniana	*	*		
Sesbania herbacea (non-native, not desirable)			*	

Species	Forested Palustrine		Non-forested Palustrine	
	Pre	Post	Pre	Post
Solidago fistulosa				*
Symphiotrichum carolinianum	*	*		
Taxodium ascendens	D	D	*	*
Taxodium distichum		*		
Thalia geniculata		*		*
Utricularia sp.		*		*
Woodwardia aereolata	*	*		
Woodwardia virginica		*		*
Xyris elliottii		*		*
Xyris sp.		*		*

Please see Section 4.0 for details on future vegetation in mitigation areas.

2) Species characteristics such as densities, general age and health, and native/non-native/invasive status.

Wetlands on the CCTC site are altered by past history of logging and hydrological alteration. All wetlands were logged during the 1990s as part of ongoing agricultural operations. As a result, trees in wetlands are small and mostly shrubby in stature. Most species present are native; however, invasive non-natives such as Peruvian primrose-willow (*Ludwigia peruviana*) and invasive natives such as cattail (*Typha* sp.) are common. Also present in abundance are species indicative of high nutrient loads including water hyacinth (*Eichhornia crassipes*), water spangles (*Salvinia minima*) and mosquito fern (*Azolla caroliniana*). Most of the wetlands are ditched and some are the result of human activities (parts of a borrow pit are jurisdictional). Almost all wetlands are surrounded by pasture or roads. All are grazed. Cypress Creek, which is in good condition but which is associated with few wetlands within the project site, is immediately south of the project site. Overall, wetlands on the project site are of moderate to low quality due to long term agricultural use.

3) Percent vegetative cover; community structure (canopy stratification).

Impact Site and On-Site Mitigation Area

As indicated above, the forested wetlands are recovering from past logging, and the trees are small in stature. Percent vegetative cover is high, typically exceeding 75%.

Alston Mitigation Site

The Alston Mitigation Site must be divided into preservation and restoration/enhancement areas. Within the preservation areas, the community structure is generally good. Wetlands have dense overstories with canopies exceeding 75% and diverse groundcover. Most have a relatively sparse shrub layer.

Within the pasture restoration/enhancement area, wetlands are severely altered. Forested wetlands have dense canopies but virtually no understory and no shrub layer due to heavy cattle use. The historic slough has been cleared and lacks trees. It is dominated by torpedo grass (*Panicum repens*). Herbaceous wetlands are dominated by species tolerant of grazing, mostly soft rush (*Juncus effusus*) and smartweed (*Polygonum hydropiperoides*) which are disliked by cattle. Diversity is low.

South of the pasture restoration/enhancement area are forested wetlands to be enhanced. These wetlands have a good tree cover; however, in one case, pines have invaded the overstory, and the groundcover is dominated by species tolerant of extended dry conditions.

4) Map showing location of plant communities.

Maps of plant communities are included in Appendix A, Figure Nos. 6A and 29. For Figure 29, areas labeled Upland Enhancement 1 and Wetland Creation (savanna) are currently pasture, and Wetland Enhancement 1 (historic slough) is currently wet pasture that is jurisdictional.

g) Existing soils

1) Soil profile description (e.g., soils survey classification and series) and/or stream substrate (locate soil samples on site map).

Maps of soils on the CCTC and Alston Mitigation Site are found in Appendices A, Figures 4 and 26.

2) Results of standard soils analyses, including percent organic matter, structure, texture, permeability.

This information is not available.

h) Existing wildlife usage (indicate possible threatened and endangered species habitat).

Impact Site and On-Site Mitigation Area

This is a summary of listed species information previously provided.

Wood Stork

Detail on wood storks has been provided to the USFWS. To summarize, no wood stork colonies exist on site. The closest active colony (in 2006) was at Heron Pointe approximately 3.5 miles to the northwest. The colony that had been present 1.25 miles to the south near the junction of I-75 and I-275 was totally abandoned in 2006 (this appears to be the result of high tree mortality which may be the result of past overuse by the storks). The Applicant is in communication with Linda Smith of the USFWS and we anticipate a response in the near future.

The Applicant will be creating more wood stork foraging habitat at the CCTC than will be lost. Habitat will be created on littoral shelves of stormwater ponds that will be planted to native

species and in one 8.27 acre on-site wetland mitigation area. Approximately 11.79 acres will be lost and 21.35 acres will be created.

Gopher Tortoise - Observed

Gopher tortoises (state threatened) were observed in the improved pasture in the southern part of the site and in shrubby areas that are recently cut hardwood hammock. The northern part of the site was too wet for tortoises, and none were seen. The Permittee has a permit to relocate gopher tortoises on this site in accordance with the regulations of the FFWCC. Tortoises will relocated to the managed, natural uplands on the Alston Mitigation Site.

American Alligator - Observed

One alligator (Florida species of special concern [SSC], federal threatened due to similarity of appearance) was observed near the Cypress Town Center Creek site during the wetland wildlife surveys. It was using the Cypress Creek system. Alligators are anticipated to use, at least occasionally, the larger wetlands and Cypress Creek. The American alligator is listed; however, it has recovered from past low population levels to the extent that a limited harvest has been established by the FFWCC.

Eastern Indigo Snake – Not observed

Inadequate habitat for maintenance of eastern indigo snakes exists on the impact site in its predevelopment state.

Wading Birds - Little Blue Heron, Snowy Egret, Tricolored Heron, Wood Stork, White Ibis – Observed

Observed were snowy egret (Florida SSC), tricolored herons (Florida SSC), little blue herons (Florida SSC), white ibises (Florida SSC), snowy egret (SSC) and wood storks (Florida and federal endangered). All were foraging or loafing. None were nesting.

Florida Sandhill Crane – Observed

Florida sandhill cranes (Florida threatened) were observed using pastures on the site for foraging. One unsuccessful attempt at nest construction was observed in 2002. Repeated surveys have not indicated any more recent attempts.

Alston Mitigation Site
With the exception of surveys for gopher tortoises (an upland species), no formal wildlife surveys have been conducted on the Alston mitigation site. Species observed on site during site visits include the following:

Common Name	Scientific Name
American alligator	*Alligator mississippiensis*
American crow	*Corvus brachyrhynchos*
Black vulture	*Coragyps atratus*

Common Name	Scientific Name
Cattle egret (foraging)	*Bubulcus ibis*
Florida sandhill crane	*Grus canadensis pratensis*
Fox squirrel	*Sciurus niger*
Gopher tortoise (resident)	*Gopherus polyphemus*
Gray squirrel	*Sciurus carolinensis*
Great blue heron (foraging)	*Ardea herodias*
Great egret (foraging)	*Casmerodius albus*
Greater sandhill crane	*Grus canadensis*
Green tree frog	*Hyla cinerea*
Killdeer	*Charadrius vociferous*
Lesser yellowlegs	*Tringa flavipes*
Little blue heron (foraging)	*Egretta caerulea*
Mourning dove	*Zenaida macroura*
Northern bobwhite	*Colinus virginianus*
Northern cardinal	*Cardinalis cardinalis*
Raccoon	*Procyon lotor*
Red-shouldered hawk	*Buteo lineatus*
Roseate spoonbill (foraging)	*Ajaia ajaja*
Snowy egret (foraging)	*Egretta thula*
Tufted titmouse	*Parus bicolor*
Turkey vulture	*Cathartes aura*
White ibis (foraging)	*Eudocimus albus*
White tailed deer	*Odocoileus virginianus*
White-tailed deer (resident)	*Odocoileus virginianus*
Wild hog (resident, non-native, nuisance)	*Sus scrofa*
Wild turkey	*Meleagris gallopavo*
Wood stork (foraging)	*Mycteria americana*

i) Historic and current land use; note prior converted cropland.

Impact Site and On-Site Mitigation Area

Historically, this site was low uplands dominated by long leaf pine with an understory of saw palmetto and forbs (flatwoods). Distributed within this site were palustrine wetlands, mostly forested. A few of these were isolated, but most were connected either to Cypress Creek or to Cabbage Swamp (to the north) by shallow sloughs. Two wetlands were contiguous with Cypress Creek. Only two non-forested palustrine wetlands were present.

More recently (in the last 50 years), all wetlands were ditched or otherwise altered. Wetlands on the northern half of the property were altered (via ditch) to outfall to the south toward Cypress Creek. Construction of I-75 severed the connection between one wetland in the southeastern part of the site from Cypress Creek and it and several other wetlands on the east side outfall through culverts under I-75 into other wetlands (off site).

Alston Mitigation Site

Historically, the Alston Mitigation Site included low uplands dominated by flatwoods, a forested wetland slough, and a number of isolated wetlands. The latter were either cypress-dominated forested wetlands, shallow marshes, or savannas. The latter term refers to areas that would have met Corps jurisdictional criteria via saturation to the surface. They would have been mostly open and dominated by wiregrass and likely had occasional slash pines.

Much of the Alston Mitigation Site retains native vegetation. However, there are areas where the hydrology has been altered by either ditching (dewatering) or impoundment (by inadequately constructed wetland culverts and crossings). Approximately 70 acres of the site has been converted to pasture. Wetlands within the pasture area have altered vegetation. Forested wetlands have virtually no groundcover, marshes are dominated by species not palatable to cattle, mostly soft rush and smartweed, and savannas are converted to bahia grass. Nuisance species are dominant in the non-forested pasture wetlands.

j) Current owner(s)

Impact Site and On-Site Mitigation Area

Pasco 54 Ltd.
Pasco Properties of Tampa Bay, Inc.
Pasco Ranch, Inc.
509 Guisando de Avila, Suite 200
Tampa, FL 33613

Alston Mitigation Site

Mr. Brad Alston
1521 Touchton Road
Lutz, FL 33549

k) Watershed context/surrounding land use.
1) Impairment status and impairment type (e.g., 303(d) list) of aquatic resources.

Impact Site and On-Site Mitigation Area

The impact site lies in the Cypress Creek sub-basin of the Hillsborough River Basin. Impaired aquatic resources include water quality (the site is heavily grazed), water quantity (most wetlands are ditched), and wetland wildlife habitat (surveys indicated low usage by wetland wildlife including wading birds). All wetlands have a long history of agricultural usage. All forested wetlands are shrubby and lack canopy coverage due to past logging.

Alston Mitigation Site

The site lies in the Hillsborough River basin. Relative to the Impact Site, there is less impairment. Only wetlands in the southern part of the site have been ditched or impounded. There is no recent logging. All wetlands have a history of agricultural usage. Cattle have access to the entire site and hence water quality is impaired. Casual observation suggests relatively high usage by wildlife including wading birds.

2) Description of watershed land uses (percent ag, forested, wetland, developed).

Impact Site and On-Site Mitigation Area

The Cypress Creek sub-basin .of the Hillsborough River basin lies in a rapidly urbanizing area. Much of Cypress Creek and natural lands along the creek are protected. Areas outside of public ownership are generally developed, mostly as residential areas, or are in the process of being developed. Approximately 64 percent is agricultural, 3 percent is upland forest, 33 percent is wetland, and nothing is developed.

Alston Mitigation Site

The site lies in the Hillsborough River basin. It is in the upper Hillsborough River basin. Approximately 23 percent is agricultural (pasture), 43 percent is upland forest, 34 percent is wetland, and none is developed.

3) Size/Width of natural buffers (describe, show on map).

Impact Site and On-Site Mitigation Area

Please see the aerial photograph in Appendix A, Figure 3 to see natural buffers. These buffers are relatively narrow due to I-75 forming the eastern site boundary, CR 54 on the northwest side, agricultural land uses (known to be in the process of seeking development approval) on the north, Cypress Creek and a large agricultural property (seeking development approval) on the south, and a small agricultural property and subdivisions on the west.

Alston Mitigation Site

Please see the aerial photograph in Appendix A, Figure 24 to see natural buffers. The Alston Mitigation site is bounded by a large naturally vegetated public land ownership on the south, east, and north. On the west it is bounded by a mixture of naturally vegetated lands and agricultural lands (pasture).

4) Description of landscape connectivity: proximity and connectivity of existing aquatic resources and natural upland areas (show on map).

Impact Site and On-Site Mitigation Area

Please see the aerial photograph in Appendix A, Figure 3 to see landscape connectivity. With the exception of Cabbage Swamp on the North and Cypress Creek on the south, there is no connectivity to natural lands. Connectivity via Cabbage Swamp and Cypress Creek will not be altered by the project. The on-site mitigation areas are located adjacent to wetlands associated with the creek, so to the extent possible, these mitigation sites will maintain such connectivity as exists.

Alston Mitigation Site

Please see the aerial photograph in Appendix A, Figure 24 to see landscape connectivity. The Alston Mitigation Site is bounded by a large naturally vegetated public land ownership on the south, east, and north. On the west it is bounded by a mixture of naturally vegetated lands and agricultural lands (pasture). The Alston Mitigation Site expands on a major natural area. The proposed mitigation eliminates pasture and enhances connectivity within the site. The choice of the Alston Mitigation Site was made, in part, because Pasco County lists it as important to maintaining connectivity of natural lands and because the SWFWMD had previously attempted to acquire it for the same reason.

5) Relative amount of aquatic resource area that the impact site represents for the watershed and/or region (i.e., by individual type and overall resources).

Impact Site and On-Site Mitigation Area
The impact site represents less than one (0.98) percent of the wetland resources of the Cypress Creek sub-basin and 0.18 percent of the wetland resources of the Hillsborough River Basin. The impacts represent 0.32 percent of the wetland resources of the Cypress Creek sub-basin and 0.06 percent of the wetland resources of the Hillsborough River Basin. None of the wetland impact areas on the impact site is unique.

Alston Mitigation Site

The Alston Mitigation Site represents 0.09 percent of the wetland resources of the Hillsborough River Basin.

3) Mitigation Site Selection & Justification

a) Site-specific objectives: Description of mitigation type(s), acreages and proposed compensation ratios.

Mitigation will be provided by a combination of on-site wetland creation, off-site wetland restoration creation and enhancement, and upland ecosystem preservation and management. Proposed compensation is being provided in terms of UMAM functional loss and lift units. Total COE jurisdictional wetland impacts associated with the project are 53.89 acres. An additional 9.65 acres of jurisdictional man-made surface waters will also be filled. The total functional loss for the filling of wetlands and surface waters is 38.69 functional units.

The function lift has been computed to be 38.90 units for all wetland specific mitigation activities (wetland creation, enhancement and preservation). In addition, the 129.9 acres of upland restoration/enhancement and upland preservation on the Alston property result in 58.9 units of functional lift. See the UMAM analysis (Appendix B) for detail.

The on-site component of the mitigation plan consists of wetland creation. The creation areas are being provided, consistent with Regulatory Guidance Letter (RGL) No. 02-2 to as closely as possible approach 1:1 compensation for the wetland acreage losses. Three wetland creation areas; M1 (2.95 acres), M2 (2.40 acres) and M3 (8.27 acres), totaling 12.62 acres, will be constructed on the project site. The creation areas are adjacent to retained natural wetlands and provide buffers between the development and the natural wetlands. They also will assist in maintaining the natural hydrological regime of Cypress Creek which forms the southern boundary of the development site (Cypress Creek is not directly impacted by the project).

The Alston Mitigation Site component of the mitigation plan can be described as large-scale ecosystem enhancement/restoration and management that includes the enhancement/restoration of wet pasture to wetlands, hydrological enhancement of dewatered wetlands, restoration of mesic pasture to flatwoods, and upland preservation coupled with ecologically sound management. The mitigation will provide more functional improvement in wetland size and quality to offset the loss of wetland functions than required under US Army Corps of Engineers (COE) regulations as determined by the UMAM.

The Alston Mitigation Site component of the mitigation plan is consistent with US Army Corps of Engineers RGL No. 02-2 dated December 24, 2002 and titled "Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899." The purpose of this RGL is to clarify and support the national policy for "no overall net loss" of wetlands and reinforce the Crops' commitment to protect waters of the United States including wetlands. This guidance applies to all compensatory mitigation proposals associated with permit applications submitted for approval after 12/24/02. The numbers and headings below refer to the quoted section of the RGL, and all excerpts from the RGL are italicized:

2.a. Districts will use watershed and ecosystem approaches when determining compensatory mitigation requirements, consider the resource needs of the watersheds where impacts will occur, and also consider the resource needs of neighboring watersheds.

2.b. Applicants will be encouraged to provide compensatory mitigation projects that include a mix of habitats such as open water, wetlands, and adjacent uplands. When viewed from a watershed perspective, such projects often provide a greater variety of functions.

2.c. There may be instances where permit decisions do not meet the "no overall net loss of wetlands" goal because compensatory mitigation would be impracticable, or would only achieve inconsequential reductions in impacts. Consequently, the "no overall net loss of wetlands goal" may not be achieved for each and every permit action, although all Districts will strive to achieve this goal on a cumulative basis, and the Corps will achieve the goal programmatically.

Functional Replacement: For wetlands, the objective is to provide no net loss of functions, with an adequate margin of safety to reflect anticipated success. On an acreage basis, the ratio should be greater than one-to-one where the impacted functions are demonstrably high and the replacement wetlands are of lower function. Conversely, the ratio may be less than one-to-one where the functions associated with the area being impacted are demonstrably low and the replacement wetlands are of high function.

Acreage Surrogate: In the absence of more definitive information on the functions of a specific wetland site, a minimum one-to-one acreage replacement may be used as a reasonable surrogate for no net loss of functions.

On-site and Off-site Mitigation: In choosing between on-site or off-site compensatory mitigation, Districts will consider: 1) likelihood for success; 2) ecological sustainability; 3) practicability of long-term monitoring and maintenance or operation and maintenance; and 4) relative costs of mitigation alternatives:

Upland Areas: Under limited circumstances, Districts may give credit for inclusion of upland areas within a compensatory mitigation project to the degree that the protection and management of such areas is an enhancement of aquatic functions and increases the overall ecological functioning of the mitigation site, or of other aquatic resources within the watershed. The establishment of buffers in upland areas may only be authorized as mitigation of the District determines that this is best for the aquatic environment on a watershed basis.

The Alston Mitigation Site provides compensatory mitigation that is totally consistent with the RGL. It has been deemed regionally significant by the SWFWMD which issued the ERP for the site on the basis of all mitigation being provided at the Alston Mitigation Site, benefits the watershed (Hillsborough River) by providing natural and sustainable buffers and wetlands, provides for functional replacement by restoration of savanna wetlands that have largely been lost in the region, enhances a degraded forested slough system, and provides upland buffers that will prevent future impacts.

b) Watershed/regional objectives: Description of how the mitigation project will compensate for the functions identified in the Mitigation Goals section 1(c).

The development team for the Cypress Creek Town Center conducted a detailed mitigation alternatives analysis (see Appendix I). On-site mitigation alternatives were rejected as a sole alternative early in the assessment process due to configuration requirements for a regional mall, available acreage, and site topography. All acreage that could be converted into viable wetlands given the configuration, available acreage, and topography is being used for wetland creation and

is included in this Mitigation Plan as one component of the plan. In addition, the team looked for off-site locations that could meet the requirements of all permitting agencies including the Corps, SWFWMD, Pasco County, and the Tampa Bay Regional Planning Council. To select an off-site location, the team conducted the detailed mitigation analysis that is included herein as Appendix I. The selection criteria included 1) location, 2) technical feasibility, 3) cost feasibility, and 4) benefit to the region. The site was required by Pasco County to be in Pasco County and required by the SWFWMD to be within the Hillsborough River Basin. Technical feasibility was based on existing hydrology, potential to correct hydrological alterations, landowner concurrence, and soils. Cost feasibility was a function largely of landowner willingness to sell the land or provide a conservation easement over the land and allow mitigation to occur for a practicable cost. Regional benefit was based on requirement of the Regional Planning Council and the SWFWMD. The latter required that the selected mitigation area meet strict standards for "regional significance" including but not limited to providing connectivity along major streams, a wildlife corridor, or proximity to adjacent public ownerships. In addition, the site had to be able to provide adequate mitigation credit in the form of UMAM credits to more than compensate for UMAM functional credit losses on the CCTC site. The Alston Mitigation Site meets all required criteria: it lies within Pasco County and the Hillsborough River basin, it is a low-relief area with a water source (intermittent stream), portions of the site have been altered (converted to pasture) or hydrologically altered (through a combination of flow restriction, flow rerouting, and scour) and the alterations can be corrected, it has a willing owner who will allow the proposed mitigation to occur and who will allow a conservation easement to be placed over the mitigation area, meets SWFWMD requirements to be regionally significant, and can provide adequate UMAM functional lift to more than compensate for on-site losses. When combined with the on-site mitigation, it exceeds the mitigation needs for the CCTC in terms of UMAM functional loss and lift requirements.

c) Description of how the mitigation project will contribute to aquatic resource functions within the watershed or region (or sustain/protect existing watershed functions) identified in the Mitigation Goals section 1(d). How will the planned mitigation project contribute to landscape connectivity?

The mitigation project will improve aquatic resource functions within the Hillsborough River Watershed and the greater Tampa regions. The project will restore an altered slough system that was originally forested but which is currently wet pasture, restore former wet savanna wetlands, restore upland buffers, remove nutrient inputs to headwaters of the Hillsborough River from cattle and hogs, and extend environmentally sound management to a large area adjacent to public conservation ownership. The site is adjacent to the SWFWMD Upper Hillsborough Tract which protects part of the Hillsborough River basin and which is contiguous with the SWFWMD Green Swamp property.

The on-site mitigation areas will provide buffers between wetlands contiguous with Cypress Creek and the commercial development site. They will also provide wading bird foraging habitat and will be specifically designed to increase the amount of foraging habitat available in the region for the endangered Wood Stork.

d) Likely future adjacent land uses and compatibility (show on map or aerial photo).

The Alston Mitigation area is of special importance because it extends the area of land under conservation ownership. It removes acreage from agricultural uses and converts it back to a more native ecosystem. The land on three sides is either in public ownership or is being placed under conservation easements (as mitigation for other projects).

e) Description of site selection practicability in terms of cost, existing technology, and logistics.

The proposed site is suitable. It was chosen in part based on cost including purchasing the right (from the land owner) to place a conservation easement over the site and the cost of implementing the mitigation.

The technology to be used is described in detail in the work plan. The technology to be used as been demonstrated to work at other projects in the region, and it will be implemented by a team of environmental professionals who include those who have demonstrated their capacity to successfully implement the proposed technology. The ecology team will consist of Biological Research Associates, Tampa, FL with The Natives, Davenport, FL and Peer, Inc. acting as subconsultants.

f) If the proposed mitigation is off-site and/or out-of-kind, explain why on-site or in-kind options are not practicable or environmentally preferable.

On-site mitigation is being implemented to the extent feasible. Due to site configuration and requirements by the SWFWMD that the mitigation be "regionally significant," on-site mitigation is not possible for the majority of the mitigation. The mitigation site was chosen to meet the "regionally significant" requirements of the SWFWMD.

g) Existing or proposed mitigation site deed restriction, easement and rights-of-way. Demonstrate how the existence of any such restriction will be addressed, particularly in the context of incompatible uses.

There are currently no deed restrictions or rights-of-way on the mitigation sites.

h) Explanation of how the design is sustainable and self-maintaining. Show by means of a water budget that there is sufficient water available to sustain long-term wetland or stream hydrology. Provide evidence that a legally defensible, adequate and reliable source of water exists.

The mitigation plan will not change the runoff volume/water budget of the Alston Mitigation, merely remove existing minor drainage alterations. The great majority of the mitigation is removal of vegetative alterations (pasture) and enhancement or restoration of more natural site conditions through establishment of native vegetation.

Mitigation on the CCTC site will likewise not alter the existing water budget. The mitigation areas are low areas within floodplain compensation areas and adjacent to existing wetlands, and the surface water management of the mall site has been designed to maintain or enhance existing hydrological conditions. The engineering of the site was supported by appropriate hydrologic modeling which is included with this response and demonstrates that existing and post peak elevations and durations of inundation have been maintained for the wetlands.

i) USFWS and/or NOAA Fisheries Listed Species Clearance Letter or Biological Opinion.

The project team is in coordination with Linda Smith at the USFWS and the Listed Species Clearance Letter or Biological Opinion will be provided as soon as it is available.

j) SHPO Cultural Resource Clearance Letter.

The SHPO Cultural Resource Clearance Letter for the CCTC site is enclosed as Appendix E.

4.0 Mitigation Work Plan

The Mitigation Work plan is divided into three components based on mitigation location and mitigation type:

- Alston Mitigation Site, Off-site restoration and Enhancement Plan
- Alston Mitigation Site, Off-site Upland Preservation and Management Plan
- On-site Wetland Creation Plan

General maps of the mitigation sites are provided in Appendix A. Each major mitigation area is described in detail in the following paragraphs.

4.1 Alston Mitigation Site, Off-site Upland Restoration and Wetland Enhancement and Creation Plan

4.1.a. Mitigation Location.

Maps of the Alston Mitigation Site showing the restoration, enhancement and creation areas are shown in the attached construction plans (Appendix C). A map showing detail of the restoration and enhancement area is included as Figure 29, Appendix A. In general, the 249.1-acre Alston property has three distinct zones. These are the north, central and south. In this section we will discuss the activities in the central and southern portions of the site. This is the portion of the project that involves active construction in order to enhance, restore and create wetlands as well as restore upland habitat. The central portion of the site currently consists of improved pasture and highly degraded wetlands. This portion of the site will be enhanced via restoring and lengthening of hydroperiods, as well as re-establishment of native species composition. The southern portion of the site (all areas south of the pasture) consists of somewhat dewatered cypress wetlands as well as relatively undisturbed flatwoods habitats. The proposed mitigation plan will rehydrate the wetland areas by means of the construction of several berms.

4.1.b Timing of Mitigation

Mitigation will occur concurrently with site development. Construction activities on the Alston off-site mitigation area consist of three basic steps; eradication of pasture grasses, construction of berms and planting. The following is the proposed schedule of activities. The details of each step will be described in greater detail in Section 4.1.d.

April 2007 – Erect hog fencing.

May 2007 – Begin eradication of pasture grasses via sod removal followed by spot application of herbicide.

May 2007 – Construction of rehydration berms and road crossings.

June/July 2007 - Preparation of native flatwoods seed donor site via a prescribed burn.

November/December 2007 – Broadcast seed (obtained from the previously prepared donor flatwoods) over upland restoration and wetland enhancement and creation areas.

July through October 2008 – Plant containerized herbs shrubs and trees in wetland enhancement and creation areas.

June through August 2010 – Burn seeded sites excluding wetland areas with planted trees and shrubs.

August through October 2010 – Plant containerized shrubs and trees in upland restoration areas.

The timing of the initiation of activities will depend on the effectiveness of the grass eradication procedure. It is critical that the pasture grasses be completely eliminated before re-establishment of native species can begin. If the eradication is not accomplished in the growing season of 2007 the schedule will be delayed until the following year.

4.1.c Grading Plan/Plan details

Construction sheets showing the location and details of each feature are included as Appendix C. The berms are labeled A though D and the two water crossings are labeled Road Crossing R and S (refer to construction sheet 53).

4.1.d Description of Construction Methods

The Alston Mitigation Site Restoration and Enhancement Plan consists of restoring and enhancing altered habitats. These habitats are currently both hydrologically and vegetatively altered. Construction will consist of elimination of pasture vegetation and nuisance species, restoration of historic hydrology to the extent feasible, planting with desirable native species, and maintenance. Construction will be done with a combination of agricultural equipment (used for elimination of pasture grasses and nuisance vegetation and for planting of desired future vegetation) and earth moving equipment such as bulldozers and grading pans.

It is the intent of the Permittee to conduct the mitigation activities in the most sensitive manner in regard to the planting material and the downstream wetlands. Erosion and sedimentation control measures will be used both at key locations within the mitigation area and downstream. Turbidity will be controlled through detention and appropriate siltation barriers. These measures will remain in place until the mitigation area has stabilized. The contractor will ensure that the water being discharged meets state water quality standards prior to discharge to the downstream wetlands. A QEP will supervise the mitigation activities. The QEP may make minor in-field adjustments during the mitigation construction to avoid or minimize any adverse, unforeseen impacts to the existing adjacent wetlands or the mitigation area itself to better ensure the success of the mitigation area and protection of the downstream wetlands. Such adjustments may include minor changes to the erosion/sedimentation controls, construction techniques and mitigation access points.

Removal of Cattle and Exclusion of Wild Hogs

Wild hogs are currently abundant on the property. Wild hogs pose one of the greatest threats to the success of many restoration projects in Florida, so it is critical that they be excluded from all enhancement and restoration areas where there will be any soil disturbance, seeding, or planting.

Hogs are particularly attracted to loose areas of soil that have been freshly planted. Hog damage can be the largest factor impacting the success of mitigation activities on the site since hogs can dig up and totally destroy acres of newly planted flatwoods or wetlands overnight. Cattle eat and trample plantings and their droppings often contain both weed seedlings and nutrients that benefit the weeds and lower water quality. The entire 249.1-acre Alston Mitigation Site will be fenced to exclude cows. Those

portions of the site where pasture restoration and enhancement activities will occur will be fenced to also exclude wild hogs. Hog fencing will be accomplished using a wire mesh "hog fence." The limits of the Hog fencing are shown on Construction Sheets 44, 45 and 46. The hog fence will be installed prior to or immediately following sod removal in order to prevent re-inoculation of the area with invasive species as a result of either cattle or hog droppings.

Elimination of Pasture Grasses

All portions of the site that are currently dominated by pasture grasses will need to have those grasses eliminated. The pasture grasses, primarily bahia (*Paspalum notatum*) and Bermuda (*Cynodon dactylon*), will be eradicated via stripping of the sod layer combined with spot herbicide treatments and discing if necessary. The sod will be stripped to a depth that will remove the sod and underground rhizomes and roots. This will also result in a lower ground elevation/higher water table relative to the ground surface.

A QEP knowledgeable about plant species identification will be on site during sod removal and will be in charge of all herbiciding in order to preserve any valuable native vegetation existing on the site. The site will be checked for vegetation that needs to be resprayed, and touch-up applications will be applied as needed.

4.1.e Construction Schedule

See Section 4.1.b above (Timing of mitigation activities)

4.1.f Planned Hydrology

Conceptually, the hydrological enhancement/restoration will consist of removing the effects of an extended history of localized ditching and rerouting of water and the clearing of the forested slough which increased the speed of water movement across the site resulting in some channelization in areas that were historically sheet flow. The hydrological enhancement/restoration will consist of the placing of control structures and berms in strategic locations to restore the historical pattern of water flow. Low berms will be installed to detain water in the slough and in existing "pasture wetlands" such that they will have more reliable and longer hydroperiods. All controls will be designed so that fish can swim into the wetlands at high water.

The enhancement of the wetlands on the southern, forested portion of the site will depend on lengthening of the hydroperiods that will occur by restricting water flow at road crossing S (See construction sheets 43a and 50). The structure has been designed to restrict water flow until it flows over the road at elevation 93.7 ft NGVD resulting in the shunting of water to the east and then north across road crossing R which will be lowered to elevation 93.5 ft NGVD. In this way we will force water to flow across Road Crossing R and through an existing degraded cypress wetland that exists in the pasture. Thus rehydrating this wetland and expanding into the pasture. Berm B (top elevation 93.25 ft NGVD, see construction sheet 45), located west of the existing cypress wetland, will block a small ditch that drains this wetland and will further holds back water resulting in a much longer hydroperiod not only in the existing cypress wetland and will also raise the water table in the northwest portion of the property. The wetland savanna habitat that is proposed in that area will have a short period of inundation but will be saturated for much of the growing season (long hydroperiod).

4.1.g Planned Vegetation

Planting Plan for Slough System

The heart of the mitigation consists of enhancement and restoration of an altered slough system that runs through the Alston Mitigation Site. In its current state, this system is open wet pasture and wet prairie dominated by torpedo grass; it has no trees other than a few pines on a raised island. The flows have been altered by ditches and structures downstream and upstream of the pasture which result in reduced hydroperiods within the pasture and likely pulses of water that run through the system more rapidly than occurred historically. The enhancement and restoration consist of improving the hydrology of the system by constructing a series of low berms and replanting the slough such that it again becomes a forested slough bordered by wet prairie, savanna, and hydric flatwoods. Some portions of the area are currently jurisdictional, and activities in those portions are termed "enhancement." Other areas are currently non-jurisdictional, and activities in those areas are termed "creation" or "restoration" depending on whether or not the areas were historically wetlands.

The vegetation in the slough system has been impacted by removal of almost all trees and shrubs as a result of land management and grazing. The enhancement of the slough system will begin with removal of non-desirable species during site preparation. Trees and shrubs will need to be planted. Herbaceous species will be introduced to the site via hand collected seed and flail-vac collected seed. The site will also be augmented with pickerelweed and arrowhead in deeper areas to speed colonization and provide cover during the early successional stages of the proposed forested system.

A planting scheme has been devised that will provide a system similar to the system that once meandered through flatwoods. The deepest part of the system will be planted with cypress and tupelo with a few pockets of pop ash. Shallower edges will include some red maples, dahoon holly, pond cypress, and sweet-bay. The shallowest areas will be predominantly laurel and water oak. Landward, there will be bands of wet prairie, savanna, and hydric flatwoods.

Wetland shrubs will be planted at densities and in locations typical for forested slough systems. The dominant shrub species in the central portion will be buttonbush.

Herbaceous species will largely be allowed to recruit into the system. However, since they are largely absent currently and would have been abundant in deeper areas selective planting will be sued to speed recolonization.

Table 4-1 provides a palette of shrubs and trees typically found in slough, wet prairie, savanna, and hydric flatwoods systems in west-central Florida. All supplemental plantings will come from this palate of species.

Planting Plan for Existing Cypress Wetlands in Pasture

Three cypress wetlands exist in the pasture. Two of these are currently dewatered and the hydrological restoration will enhance their hydroperiods by blocking the flow of water to the west as described in Section 4.1.e. All are heavily grazed and have little or no native groundcover in the understory. The approach to enhancement of these wetlands is to exclude cattle, herbicide any nuisance species, and to enhance the wetlands with plantings of desirable wetland plants (as shown in Table 2) to increase the diversity of groundcover in the wetlands. Given that the native seedbank will still exist in these wetlands, spot herbicide applications will likely be needed for several years. The hydrologic

enhancement coupled with removal of cows will provide the great majority of the improvement in wetland function.

Table 4-1. Species to be used in supplemental plantings by habitat.

Scientific Name	Common Name	Slough	Hydric Flatwoods	Wet Prairie	Marsh	Cypress	Mesic Flatwoods
Trees							
Acer rubrum	Red maple	✓	✓			✓	
Cornus foemina	Swamp dogwood	✓	✓			✓	
Fraxinus caroliniana	Pop ash	✓					
Gordonia lasianthus	Loblolly-bay	✓	✓				
Ilex cassine	Dahoon holly	✓	✓			✓	
Liquidambar styraciflua	Sweet-gum	✓	✓				
Magnolia virginiana	Sweet-bay	✓	✓			✓	
Nyssa sylvatica var. *biflora*	Swamp tupelo	✓			✓	✓	
Persea palustris	Swamp bay	✓	✓				
Pinus elliottii	Slash pine	✓	✓				✓
Pinus palustris	Longleaf pine						✓
Quercus laurifolia	Laurel oak	✓	✓			✓	
Quercus nigra	Water oak	✓	✓				
Quercus virginiana	Live oak		✓				
Sabal palmetto	Cabbage palm	✓	✓				
Salix caroliniana	Coastal-plain willow	✓			✓		
Taxodium ascendens	Pond cypress	✓			✓	✓	
Taxodium distichum	Bald cypress	✓				✓	
Vaccinium arboretum	Sparkleberry						✓
Shrubs							
Aster caroliniana	Climbing aster	✓			✓	✓	
Bejaria racemosa	Tarflower						✓
Callicarpa americana	Beautyberry						✓
Gaylussacia dumosa	Dwarf huckleberry		✓				✓
Gaylussacia nana	Dangleberry		✓				✓
Gelsemium sempervirens	Yellow jessamine		✓				✓
Hypericum fasciculatum	Sandweed		✓	✓	✓	✓	
Hypericum reductum	St. John's wort		✓				✓
H. tetrapetalum	St. John's wort		✓	✓	✓	✓	
Ilex glabra	Gallberry		✓	✓			✓
Itea virginica	Virginia-willow	✓	✓		✓	✓	
Lyonia fruticosa	Staggerbush						✓
Lyonia lucida	Shiny lyonia		✓				✓
Photinia pyrifolia	Red chokecherry		✓				✓
Quercus minima	Dwarf live oak		✓				✓
Quercus pumila	Running oak						✓
Rhododendron viscosum	Swamp honeysuckle	✓	✓				
Rhus copallina	Shining sumac						✓

Scientific Name	Common Name	Slough	Hydric Flatwoods	Wet Prairie	Marsh	Cypress	Mesic Flatwoods
Serenoa repens	Saw palmetto		✓				✓
Vaccinium darrowi	Little blueberry		✓				✓
Vaccinium myrsinites	Shining blueberry		✓				✓
Vaccinium corymbosum	Highbush blueberry	✓	✓				
Herbaceous (supplemental only)							
Bacopa caroliniana	Lemon bacopa	✓		✓	✓	✓	
Blechnum serrulatum	Swamp fern	✓		✓		✓	
Nymphaea odorata	Fragrant waterlily	✓			✓	✓	
Nympoides aquatica	Floating hearts	✓			✓	✓	
Nuphar advena	Spatterdock	✓			✓		
Osmunda cinnamomea	Cinnamon fern	✓	✓			✓	
Osmunda regalis	Royal fern	✓				✓	
Pontederia cordata	Pickerelweed	✓			✓	✓	
Sagittaria graminea	Arrowhead	✓			✓	✓	
Sagittaria lancifolia	Arrowhead	✓			✓	✓	
Sarurus cernuus	Lizard's tail	✓				✓	
Spartina bakeri	Sand cordgrass			✓			
Woodwardia aereolata	Netted chain fern	✓				✓	
Woodwardia virginica	Chain fern	✓	✓			✓	

Planned Vegetation for Existing Herbaceous Wetlands in Pasture

A number of areas of non-forested jurisdictional wetland occur in the pasture. These areas are dominated by pasture grasses and wetland forbs that are not palatable to cattle. The approach to enhancement of these wetlands is to remove the cows, herbicide any nuisance species that are observed, and to enhance the wetlands with plantings of desirable wetland plants to increase the diversity of groundcover in the wetlands. The groundcover will be enhanced by seeding with material from the donor site and planting of appropriate wetland species from Table 4-1.

Planned Vegetation for Wet Prairie, Savanna, Wet Flatwoods and Flatwoods Restoration Areas

As described in Section 4.1.e, additional water will be shunted through to the existing cypress wetland in the pasture via the construction of the structure at Road Crossing S and the lowering of Road Crossing R. Construction of the berm west of the forested wetland, will block a drainage ditch and reduce the rate of flow of water from the cypress wetlands to the wetland and north. This will result is an expansion of the wetland area. The margins of this area will have a hydroperiod that meets the standard of wetland hydrology (saturated or inundated at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted to saturated soil conditions) but is not inundated for most of the growing season. These grassy savanna and wet prairie areas occur as natural transitional fringe around marshes, cypress domes, and sloughs. For purposes of this document, savanna and wet prairie are distinguished on the basis of jurisdictional status, with wet prairie being those areas that will easily meet both COE wetland delineation methodology and Florida Chapter 62-340 F.A.C., and savanna areas as those that will meet the COE jurisdictional criteria but may or may not be jurisdictional based on the state methodology.

The savanna and wet prairie areas will be seeded with hand and flail-vac collected seed with additional plantings if needed. Herbaceous species will be planted only in those areas where adequate appropriate cover is not attained through seeding and to encourage diversity by introducing species appropriate to the system.

The remaining portions of the pasture on the Alston Mitigation Site will be restored to mesic and hydric flatwoods and wet prairie depending on hydrology. The objective is to eliminate the pasture grasses to restore the site to groundcover, shrub, and tree species appropriate to mesic and hydric pine flatwoods as indicated by soils.

Well-managed mesic and hydric flatwoods ecosystems have groundcover dominated by grasses, sedges, and forbs. Historically, palmettos were a minor component of the system (winter burns and grazing result in increased palmetto density). High quality flatwoods communities are best described as savannas with scattered trees. The flatwoods community is pyrophitic (relies on regular and periodic fire), and the groundcover must be able to carry fire. The term savanna as used here refers to a similar, transitional wetland community that lacks palmettos and pines.

For this reason, this flatwoods restoration plan has, as a large component, direct seeding of the groundcover. Unlike typical wetland restoration, flatwoods groundcover species rarely establish on their own, and planting them from nursery stock can be cost prohibitive and ineffective. Direct seeding most directly assists with the herbaceous cover; however, some shrub and tree species can also be introduced through the direct seeding process.

After a period of establishment for the groundcover, additional trees, shrubs, and other groundcover species will be planted from container-grown plants to add structure and diversity to the developing ecosystem.

Native seed will be harvested from a donor site that will be prepared for seed harvest via a prescribed burn in June/July of 2007 as described in Section 4.1.b.

Seed Collection Methodology

Several visits will be made to the donor site before and during mechanical harvesting begins to hand collect species that ripen earlier than the harvest time or which are shorter than the harvesting height. Key species include, but are not limited to, lopsided Indiangrass (*Sorgastrum secundum*), beaked panicum (*Panicum anceps*), Elliott's lovegrass (*Eragrostis elliottii*), coastal lovegrass (*Eragrostis virginica*), native legumes, and other forbs such as tickseed (*Coreopsis leavenworthii*). Some savanna and wet prairie species may be added to supplement seeding on wetland edges. Tree and shrub species such as pine, saw palmetto, beautyberry, shining sumac, and coral bean may also be included. All hand-collected seed will be kept dried and/or stored until site seeding begins.

The key species for mechanical harvesting is wiregrass (*Aristida stricta*), which has a very narrow optimal harvest window, which usually begins around November 10 and may run as late as December 10. Any unusual weather events can shorten this window on either end, so the donor site must be monitored for seed readiness as well as potential seed germination beginning in late October.

Mechanical harvesting will be done with a green silage cutter with 14-ft to 17-ft cutting blades. The harvester cuts material at heights that can be raised and lowered during operation to get a maximum of seed with as little chaff as possible. Usually material more than 16 – 18 inches high is harvested. The material is then collected by screw, slightly chopped, and blown into an attached wagon. When the wagon is full, it is transported to the seeding site.

This harvest may be supplemented with a flail-vac harvester that harvests by brushing mature seed into a collecting bin.

The seed will be transported to the Alston Mitigation Site. Most material will be broadcast on the restoration site within one day of harvest. Prior to seeding, hand-collected seed will be distributed into the mix for wetter sites.

Following the direct seeding, there will be a period of progress evaluation and maintenance. The evaluation will include monitoring of exotics followed by maintenance to control exotic and nuisance species.

Many non-native and nuisance species that germinate on upland restoration sites are weedy annuals that become less prolific after the second and third years, and although the site may look messy the first couple of years, if there is good native perennial competition, weedy annuals generally decrease to acceptable standards without intervention.

One species that may need active control is tropical soda-apple (*Solanum viarum)* which, if allowed to mature can produce many thousands of seed from a single plant. Tropical soda-apple is most easily controlled by hand removal or spot herbiciding the plants when plants are very young or during the spring of the year and continuing to remove them whenever they are spotted.

Bermuda grass and torpedo grass are exceptionally difficult to eradicate, even with very intensive site preparation. These problem species require several years of very active management after site seeding. Spot spraying these species on an ongoing basis as they continue to re-emerge is the best control available.

Dog fennel, which is a native perennial pioneer species, sometimes emerges in large numbers. Though most other species can germinate with dog fennel present, its rapid growth and large size may cause it to out-compete other more desirable species. After 3 or 4 years, dog fennel begins to die off or be reduced in size. Controlled burning also helps to reduce and kill the plants when they are more mature. If dog fennel needs to be controlled, control can be accomplished by wicking the tops of the dog fennel with herbicide when it is taller than the other native vegetation.

If bahia grass should germinate from seed, or otherwise need further control, the areas where they occur may be over-sprayed with imazapic at a rate that will not be detrimental to the co-existing native species. This can be done in the late spring or early summer following seeding.

When the site is mature enough to sustain a controlled burn (2010).

The goal is to keep exotic cover to less than 5 per cent.

Supplemental Planting

Near the end of the summer, after the 2010 controlled burn, tree, shrub, vine, and other groundcover species will be planted in the seeded areas. All containerized plant species will be grown from seed sources within central Florida.

Since most upland plants are more likely to readily establish in late July and August when hot dry spells are least likely to occur and the plants are actively growing, the plants will be planted at that time. This increases chances of root growth out from the container ball and therefore, establishment and survival through the droughty months of spring. The actual time of planting will be decided by the QEP on the basis of the weather patterns and projected weather patterns at that time.

Planted species will be watered on an as-needed basis through the first dry season (usually winter – spring) until summer rains begin the following year. Careful monitoring of the site will determine when this is necessary. Watering on an 'only as needed' basis increases the rate of establishment and survival. Plants placed on well-drained soils are more likely to need extra watering, and those placed in the wetter areas may not need more than the initial watering.

Trees will be planted at 50 trees or fewer per acre. Shrubs will be planted at 300 per acre.

4.1.h Planned Soils

The intent of the mitigation is not to alter the existing soils except as necessary to restore past alterations, remove sod, or construct the low water control berms. With restoration of more natural hydrology, areas mapped as wetlands on construction sheet 43A should develop more hydric soil profiles and there should be a decrease in past evidence of alteration. The USDA mapped soil types should remain.

Erosion and soil compaction should not be major issues since little disturbance to the soil is proposed. To a very large extent, erosion will be prevented by careful timing. The berms are very low and will be sodded as described above immediately after construction using native sod species. Turbidity controls will be used as needed and required where construction occurs in existing wetlands that are hydrated. Tops of berms will be hardened as described in the enclosed construction plans.

4.1.i Planned Habitat Features

No specific habitat features have been planned. Where there is currently an absence of topographic variation or snags, natural materials, such as old stumps may be selectively placed into restoration areas to provide habitat diversity.

4.1.j Planned Buffer

The restoration and enhancement areas are surrounded by natural lands owned by the SWFWMD or Hillsborough County to the north south and east. The lands to the west are natural in character on the north half of the site. The land to the west of the existing pasture area is also existing pasture. These lands will likely be restored and placed under conservation easements as mitigation for future projects in the Hillsborough River drainage basin.

4.2 Alston Mitigation Site, Off-site Upland Preservation and Management Plan

4.2.a. Mitigation Location

The north portion of the property consists of the area north of the improved pasture. The native uplands within the Alston Mitigation Site will be managed to benefit the wetlands, regional hydrology, regional water quality, and wetland biota.

4.2.b Timing of Mitigation

Mitigation will commence concurrent with site development. Maintenance activities will occur as needed based on recommendations of a Qualified Environmental Professional. See Section 8, Adaptive Management Plan for further detail.

4.2.c Grading Plan

The upland preservation and management areas will not be graded.

4.2.d Description of Methods

Nothing will be constructed within the upland preservation and management areas. They do however, need management. The management methods are described herein.

Controlled Burns

Native wildlife and vegetation in Florida are adapted to a repetitive fire regime, and certain habitats in Florida are wholly dependent upon periodic burns to maintain the health and viability of the vegetative communities and the resident animals, which in some cases may exist exclusively within specific habitats.

One species present on the Alston Mitigation Site, the gopher tortoise, is highly adapted to this type of natural disturbance. Because of its strict habitat requirements and sensitivity to seemingly minor changes in its environment, and because their burrows provide habitat for many other species, these animals are frequently considered to be a keystone species. If the habitat becomes too overgrown due to prolonged fire exclusion, it will not provide the specific habitat requirements needed by gopher tortoises and will be vacated.

Gopher tortoises inhabit dry uplands including flatwoods, sandhill, and scrub communities, particularly those which provide substantial grassy and herbaceous forage. Except on forest edges and ecotones, tortoises are generally not found in dense, shady hammocks or overgrown habitats due to an absence of suitable, mostly herbaceous, food sources. These seed sources are eliminated by the dense cover of canopy and shrub species. Frequent fire in the preferred upland communities maintains a relatively sparse canopy of pines and oaks and a diverse, dense layer of herbaceous ground cover (Abrahamsen and Hartnett 1990). The herbaceous ground cover is the principal food source for the gopher tortoise. When the frequency of periodic fires is reduced, hardwoods such as oaks and shrubs such as palmetto proliferate, causing a reduction in the amount of sunlight penetrating to ground level and a corresponding decrease in the density and diversity of herbaceous forage needed by the tortoise.

Many species of plants adapted to the upland communities also require high amounts of light provided by an open canopy to grow, and many also need periodic burning in order to reproduce. Similarly, it has been observed that upland communities which periodically burn have a higher diversity of herpetofauna and other vertebrate species when compared to uplands that do not burn on a relatively frequent schedule, as vertebrates associated with pyrophitic (fire dependent) communities will abandon the overgrown habitat (Mushinsky 1985, Wade and Lunsford 1989). Additionally, tortoise burrows have been documented to provide shelter for 60 vertebrate and 302 invertebrate species, many of which are protected by state and federal agencies (Jackson and Milstrey 1989).

Lastly, controlled fire and alternative mechanical treatments protect against wildfire. Most of the plant communities found on or adjacent to the Alston Mitigation Site are pyrophytic, that is, naturally dependant on fire and flammable. If allowed to become overgrown, fuel loads increase and wildfires can be extremely hot, difficult to control, and therefore, potentially catastrophic. If burned at appropriate intervals, fuel loads are kept low, both wildfires and controlled burns are light and manageable, and risk to property and people is low.

The Permittee will implement a periodic prescribed burn and mechanical treatment program designed to maintain habitat quality in the natural areas.

The amount of time between burns varies greatly among different natural vegetative communities. Historically, flatwoods typically burned on a two- to five-year (Meyers 1990, FNAI 1990) cycle. In order to maintain optimal conditions (canopy cover and shrub layers at a low density) for key wildlife species, particularly the gopher tortoise, the Permittee will implement a burn cycle that maximizes benefits to these species and which will encourage the burns be manageable and not very hot. With these goals, controlled burns may take place every three to five years in the flatwoods communities which typify the Alston Mitigation Site.

Management flexibility will allow for any lightning fires or other wild fires. A patchy burn pattern will be encouraged. Not all portions of a given management unit will burn or should be burned simultaneously (Abrahamsen and Hartnett 1990). A burn regime that results in habitat patches of varying ages helps to maintain habitat for species dependent on specific levels of cover or openness. In a patchy environment, many animals move to the patches that are in the preferred stage of development. Additionally, patchy burns ensure that reproductive success is lost in only a small portion of a population. For example, ground nesting birds (quail, turkeys) are particularly sensitive to burns that occur while they are nesting in the spring and early summer, as the burns are likely to destroy the nests and kill eggs and young. Incomplete burns provide habitat so that these species can nest again if one nest is lost or significantly disturbed.

Another important factor when planning this type of management is the timing of the burns. Natural fires in Florida's uplands are lightning-ignited and most occur during the late spring and early summer (May – June) just as the rainy season commences and lightning strikes are frequent (Snyder, Herndon and Robertson 1990). Small, patchy burns may also occur throughout the rainy season. Burns that coincide with the onset of the thunderstorm season trigger a late summer or early seed set in many native plant species. Additionally, fires set in latter portions of the rainy season are more likely to stop at the edges of hydrated wetlands, or burn wetlands with moist substrates only lightly and without harm, further protecting the integrity of the natural communities and minimizing the need for additional, land altering fire breaks. To mimic natural conditions as closely as possible, controlled burns will therefore take place during the late spring or early summer.

The most important part in conducting the above described management program is the actual implementation of the prescribed burns. In order to safely conduct a prescribed burn, numerous factors must be considered, including existing fuel loads, predicted weather conditions, soil moisture, risks to sensitive wildlife, adjacent habitat conditions, risks to neighboring lands, and potential impacts to human activities. Prior to conducting a prescribed burn will be made. Discussions pm where and when to burn will be made by an individual(s) qualified in performing prescribed burns. Finally, upon completion of the burn, a comprehensive assessment of the managed area will be performed to determine the successes or failures of the burn which should be considered when preparing for future management activities. This flexibility is a key component of the Adaptive Management discussed in Section 8.

Control of Wild Hogs

The European wild hog digs extensively in hammocks and selected wetlands areas churning the soil and digging up the ground cover over large areas. In the Alston Mitigation Site area, the feral hog is a problem species. Introduced from Europe, it digs up the ground flora of hammocks and wetlands while looking for food. A hog-damaged wetland looks plowed.

The wild hog will be excluded from the restoration area. Elsewhere, the best management is shooting or trapping. Hunting will be used as the primary hog control.

Cattle

Cattle will be excluded from the entire 249.1-acre Alston Mitigation Site. Please refer to Section 3 item j in the attached Conservation Easement (Appendix D)

4.2.e Description of Construction Methods

Other than fencing to exclude cattle, there will be no construction in the preservation area.

4.2.f Construction Schedule

The Alston Mitigation Site will be fenced to exclude cattle within 60 days of project commencement. No other construction is anticipated.

4.2.g Planned Hydrology

No alterations to existing hydrology are anticipated in the preservation area.

4.2.h Planned Vegetation

No alterations to existing vegetation are anticipated. Vegetation will be managed as discussed above.

4.2.i Planned Soils

No alterations to existing hydrology are anticipated in the preservation area.

4.2.j Planned Habitat features

No alterations to existing habitat features are anticipated.

4.2.k Planned Buffer

The 249.1-acre Alston Mitigation Site is surrounded by natural lands owned by the SWFWMD or Hillsborough County to the north south and east. The lands to the west are natural in character on the north half of the site. The land to the west of the existing pasture area is also existing pasture. These lands will likely be restored and placed under conservation easements as mitigation for future projects in the Hillsborough River drainage basin.

4.3 On-site Wetland Creation Plan

4.3.a. Mitigation Location.

Maps showing the locations of the three on-site wetland creation areas (M1, M2 and M3) are included as Appendix A, Figure 7.

4.3.b Timing of Mitigation

Construction of the on-site wetland creation areas will occur concurrently with site development. Construction activities for the mitigation area will commence within 30 days of wetland impacts.

4.3.c Grading Plan

Grading plans and planting plans are included as Appendix A, Figures 20 through 22B. Conceptually, each of the areas is located adjacent to an existing wetland and will be graded so that the hydrology will mimic that of the adjacent natural wetland. Each area has been design such that the majority of the area

is approximately 1.5 feet below the seasonal high water (SHW) elevation of the adjacent wetland. The SHW elevations were field verified and approved by an environmental scientist of the SWFWMD. The creation areas will be connected to an existing adjacent wetland by a small swale constructed slightly lower in elevation than the adjacent wetland's seasonal high water elevation. The swales allow water to overflow from the natural wetland when water levels are high helping to assure an adequate water supply to the created wetland. The elevation also allows wet season entry and exit by fish.

4.3.d Description of Construction Methods

A bulldozer or other appropriate mechanical equipment will be used to remove the existing soil down to the proposed grade. Silt fencing will be placed around the periphery of the construction zones to prevent erosion during construction. Side slopes above the seasonal high water elevation will be stabilized with sod after construction has been completed.

4.3.e Construction Schedule

Construction activities for the mitigation area will commence within 30 days of wetland impacts. A specific date cannot be determined prior to final issuance of all approvals needed to initiate construction.

4.3.f Planned Hydrology

As described in detail in Section 4.3.c, each wetland creation area will be hydrologically connected to an adjacent existing wetland by a small swale. In addition, because the wetland creation areas are excavated to an elevation that is below the ground water elevation, they will also receive groundwater inputs and can be expected to be inundated for 6 to 9 months in a year of normal rainfall. These areas will likely go dry during the dry season.

4.3.g Planned Vegetation

The wetland creation areas will be planted with a variety of native herbaceous and woody vegetation typical to shallow depressional wetland in central Florida. Planting plans for each area have been developed and are included as Appendix A, Figures 20-22b. The deeper zones (1.5 feet of inundation) will be planted primarily with pickerelweed (*Pontederia cordata*) and lance-leaved arrowhead (*Sagittaria lancifolia*). The intermediate depths (0.5 to 1.5 of inundation) will be planted with maidencane (*Panicum hemitomon*), canna lily (*Canna flaccida*) and prairie iris (*Iris hexagona*). The shallow edge areas (0.5 feet of inundation or less) will be planted with maidencane, rushes, beak-rushes, and sand cordgrass (*Spartina bakeri*). The entire area will be planted with 3-gallon pond cypress (*Taxodium ascendens*).

Herbaceous species will be planted on 3-foot centers and the trees will be planted on 10-foot centers. Plant material installed will be either containerized stock obtained from a reputable nursery or bare root material obtained from an approved donor wetland. It is anticipated that desirable native species will colonize the created wetland from the adjacent existing wetland thus increasing species diversity and wildlife habitat value.

4.3.h Planned Soils

The wetland creation areas will be scraped down to below the desired wetland depth. To the extent that weed free sources are available, natural soils from areas to be impacted will be moved to the creation areas and deposited such that the creation areas have the designed depth with an organic soil layer. If weed free sources are not available, the Permittee will strive to use other topsoil high in organic content to form the top layer of the mitigation wetlands. Hydric soil characteristics are expected to develop over time.

4.3.i Planned Habitat Features

No specific habitat features have been planned. Old stumps and snags from wetlands to be impacted may be selectively placed into creation areas to provide habitat diversity.

4.3.j Planned Buffer

All the wetland creation areas will be buffered to a large extent by the fact that they are bordered on at least one side by natural wetlands. These will provide a natural buffer on that side and will provide a seed source for propagules of wetland plant species that should result in increased diversity in the created wetlands. The adjacent wetlands also act as corridors allowing access for non-avian species.

Table 1. Alston Mitigation Planting Plan

Area Name	Area Type	Acres	Quantity	Size	Spacing	%	Scientific Name	Common Name
Wetland Restoration 1	Wet Prairie	14.8	14,326	1-quart BR equiv.	3' o.c.	20%	*Panicum hemitomon*	maidencane
			35,816	1-quart BR equiv.	3' o.c.	50%	*Pontederia cordata*	pickerelweed
			21,490	1-quart BR equiv.	3' o.c.	30%	*Sagittaria lancifolia*	arrowhead
			516	3-gallon	~35' o.c.	100%	*Taxodium distichum*	bald cypress
Wetland Enhancement 3 & Wetland Enhancement 4	Marshes	9.3	22,506	1-quart BR equiv.	3' o.c.	50%	*Pontederia cordata*	pickerelweed
			13,504	1-quart BR equiv.	3' o.c.	30%	*Sagittaria lancifolia*	arrowhead
			4,500	1-quart BR equiv.	3' o.c.	10%	*Thalia geniculata*	fire flag
			2,251	1-quart BR equiv.	3' o.c.	5%	*Iris hexagona*	prairie iris
			2,251	1-quart BR equiv.	3' o.c.	5%	*Canna flaccida*	golden canna
			552	3-gallon	25' o.c.	85%	*Taxodium distichum*	bald cypress
			98	3-gallon	25' o.c.	15%	*Fraxinus caroliniana*	pop ash
			650	3-gallon	25' o.c.	100%	*Cephalanthus occidentalis*	buttonbush
Wetland Enhancement 1	Historic Slough System	4.2	12,197	1-quart BR equiv.	3' o.c.	60%	*Pontederia cordata*	pickerelweed
			6,098	1-quart BR equiv.	3' o.c.	30%	*Sagittaria lancifolia*	arrowhead
			2,033	1-quart BR equiv.	3' o.c.	10%	*Thalia geniculata*	fire flag
			1,083	3-gallon	25' o.c.	100%	*Cephalanthus occidentalis*	buttonbush
			1,555	3-gallon	25' o.c.	85%	*Taxodium distichum*	bald cypress
			275	3-gallon	25' o.c.	15%	*Fraxinus caroliniana*	pop ash
Wetland Enhancement 5	Cypress Wetland	3.8	6,437	1-quart BR equiv.	3' o.c.	35%	*Blechnum serrulatum*	swamp fern
			1,839	1-quart BR equiv.	3' o.c.	10%	*Spartina bakeri*	sand cordgrass
			4,598	1-quart BR equiv.	3' o.c.	25%	*Saururus cernuus*	lizard's-tail
			3,311	1-quart BR equiv.	3' o.c.	18%	*Pontederia cordata*	pickerelweed
			1,655	1-quart BR equiv.	3' o.c.	9%	*Sagittaria lancifolia*	arrowhead
			276	1-quart BR equiv.	3' o.c.	2%	*Canna flaccida*	golden canna
			276	1-quart BR equiv.	3' o.c.	2%	*Iris hexagona*	prairie iris
			160	3-gallon	25' o.c.	60%	*Cephalanthus occidentalis*	buttonbush
			40	3-gallon	25' o.c.	15%	*Myrica cerifera*	wax myrtle
			26	3-gallon	25' o.c.	10%	*Itea virginica*	Virginia willow
			26	3-gallon	25' o.c.	10%	*Viburnum obovatum*	small viburnum
			13	3-gallon	25' o.c.	5%	*Lyonia lucida*	fetterbush

5. Performance Standards

a. Identify clear, precise, quantifiable parameters that can be used to evaluate the status of desired functions. These may include hydrological, vegetative, faunal and soil measures. (e.g., plant richness, percent exotic/invasive species, water inundation/saturation levels.) Describe how performance standards will be used to verify that objectives identified in 3(b) and 3 (c) have been attained.

b. Set target values or ranges for the parameters identified. Ideally, these targets should be set to mimic the trends and eventually approximate the values of a reference wetland(s).

Mitigation success criteria have been developed based on measurable, quantifiable parameters. Wetlands constructed for mitigation purposes will be considered successful and will be released from monitoring and reporting requirements when the following criteria are met continuously for a period of at least one year without intervention in the form of irrigation or the addition or removal of vegetation.

a. The mitigation area can be reasonably expected to develop into palustrine systems as determined by the USFWS Classification of Wetlands and Deepwater Habitats of the United States in accordance with the following table:

System	Class	Zone
Palustrine	Forested	Slough
Palustrine	Forested	Hydric flatwoods
Palustrine	Emergent marsh	Wet Prairie
Palustrine	Emergent marsh	Marsh
Palustrine	Forested	Cypress swamp
Upland	NA	Mesic flatwoods
Palustrine	Emergent marsh	Savanna

b. Topography, water depth and water level fluctuation in the mitigation area are characteristic of the wetland/surface water type specified in criterion "a."

c. The dominant, subdominant, and other appropriate species of desirable wetland plants shall be as follows:

Zone	Stratum	Dominant Species [1]	Subdominant Species [2]	Other Species (for diversity) [5]
Slough (long hydroperiod areas)	Canopy	Bald cypress	Swamp tupelo Pop ash	Pond cypress Sweet-bay
	Subcanopy	none [3]	none [3]	Coastal plain willow
	Shrubs	Buttonbush	none	None
	Groundcover	Pickerelweed	Arrowroot	Lemon bacopa Swamp fern Fragrant waterlily Alligator flag Many others

Zone	Stratum	Dominant Species [1]	Subdominant Species [2]	Other Species (for diversity) [5]
Slough (short hydroperiod areas	Canopy	Laurel oak	none [4]	Loblolly bay Dahoon holly Sweet-gum Sweet-bay Swamp bay Slash pine Water Oak Red maple Cabbage palm
	Subcanopy	none [2]	none [3]	Swamp dogwood Hornbeam
	Shrubs	Virginia-willow	none [3]	Virginia-willow Swamp honeysuckle Highbush blueberry
	Groundcover	Chain fern	Swamp fern	Netted chain fern Lizard's tail Cinnamon fern Royal fern Many others
Hydric flatwoods	Canopy	Slash Pine	none [3]	Laurel oak Water oak Red maple Loblolly-bay Dahoon holly Sweet-gum Sweet-bay Cabbage palm Live oak
	Shrubs	none [2]	none [3]	Gallberry Virginia-willow Little blueberry Swamp honeysuckle Red chokeberry Shiny lyonia Dangleberry Dwarf huckleberry St. John's worts Dwarf live oak Saw palmetto Many others
	Groundcover	none [4]	none [4]	Iris Wiregrass Beak rushes Maidencane Sedges Many others
Wet prairie	Shrubs	none [2]	none [3]	Sandweed Buttonbush

Zone	Stratum	Dominant Species [1]	Subdominant Species [2]	Other Species (for diversity) [5]
	Groundcover	none [4]	none [4]	Lemon bacopa Lizard's tail Maidencane Swamp fern Wiregrass Beak rushes Maidencane Sedges Many others
Marsh	Shrubs	Buttonbush	none [3]	Sandweed Coastal plain willow Virginia-willow
	Groundcover	Pickerelweed	Arrowhead	Alligator flag Lemon bacopa Fragrant water-lily Maidencane Cinnamon fern Many others
Cypress	Canopy	Pond cypress	none [3]	Dahoon holly Sweet-bay Swamp tupelo Red maple
	Subcanopy	none [3]	none [3]	Popash Swamp dogwood
	Shrubs	Buttonbush	none [3]	Virginia-willow Wax myrtle
	Groundcover	Pickerelweed	Arrowhead	Lemon bacopa Alligator flag Maidencane Beak rushes Many others
Mesic flatwoods	Canopy	Long leaf pine	none [3]	Slash pine Live oak
	Subcanopy	none [3]	none [3]	
	Shrubs			Saw palmetto Shiny lyonia Running oak Dwarf live oak
	Groundcover	none [3]	none [3]	Eupatoriums Beaded Panicum Coastal grasses Wirey vass Lopsided Indian grass Many others
Savanna	Shrubs	none [3]	none [3]	Gallberry Running oak Shiny lyonia Many others

Zone	Stratum	Dominant Species [1]	Subdominant Species [2]	Other Species (for diversity) [5]
	Ground cover	none [2]	none [3]	Wiregrass Beak rushes Sedges Beaded Panicum Coastal lovegrass Many others

1. Tree species must be greater than 12 feet in height and have been planted for greater than 3 years.

2. This plant community generally does not have a dominant. Low abundance of species listed in the "other species" column are appropriate.

3. This plant community generally does not have a subdominant. Low abundance of species listed in the "other species" column are appropriate.

4. This plant community is typically does not have a dominant or subdominant. High abundance of species listed in the "other species" column is appropriate.

5. All species appropriate to the zone and which provide appropriate function to the zone will be included in the determination of success.

This criterion must be achieved within eight years of mitigation area construction. The Permittee shall complete any activities necessary to ensure the successful achievement of the mitigation requirements by the deadline specified. Any request for an extension of the deadline specified shall be accompanied with an explanation and submitted as a permit letter modification to the District for evaluation.

d. Species composition of recruiting wetland vegetation is indicative of the wetland type specified in criterion "a".

e. Density of trees and percent cover meet the conditions specified in the table below.

	System Type					
Criteria	Slough (Palustrine, forested)	Hydric Flatwoods (Palustrine, forested)	Wet Prairie (Palustrine, emergent)	Marsh (Palustrine, emergent)	Cypress (Palustrine, forested)	Mesic Flatwoods (upland)
Groundcover	N/A	≥85% cover, includes shrubs	≥85% cover, includes shrubs	≥85% cover	N/A	≥85%, includes shrubs
Shrubs	≥5% cover	≥250/ac	≤10% cover	≤30% cover	≤10% cover	≥250/ac
Canopy	≥30% cover	20 or more trees/acre	≤10% cover	≤10% cover	≥30% cover	10 or more trees/acre

f. Coverage by nuisance or exotic species does not exceed 10 percent.

g. The wetland mitigation area can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

The mitigation area may be released from monitoring and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site conditions are sustainable.

6. Site Protection and Maintenance

a. Long-term legal protection instrument (e.g. conservation easement, deed restriction, transfer of title).

There will not be any deed restrictions, easements, right of way, or other types of restrictions or encumbrances that adversely impact the proposed mitigations sites. All of the proposed mitigation areas, and the existing wetland areas that will not be impacted, will be protected through the dedication of perpetual conservation easements. The conservation easement for the Alston Mitigation Area will be in a form consistent the requirements of the Southwest Florida Water Management District (SWFWMD), and incorporates a variety of provisions to ensure the long term success of the mitigation area. The on- and off-site mitigation areas will be the subject of various forms of restrictive covenants, deed restrictions and/or property owners' association agreements which will ensure the appropriate level of maintenance and monitoring. These various documents will also ensure against any existing or future incompatible uses within the project area.

The draft conservation easement for the Alston Mitigation Area is given in Appendix D.

b. Party(ies) responsible and their role (e.g. site owner, easement owner, maintenance implementation). If more than one party, identify primary party.

The Permittees will maintain management authority for implementation and day-to-day oversight of the Mitigation Plan until such time a Property Owners' Association (POA) is formed. At that time, responsibility will be transferred to the POA. The POA will have ongoing responsibility for common area improvements for the CCTC regional retail center, including the mitigation site, mitigation areas with funding generated by Common Area Maintenance (CAM) fees.

c. Maintenance plan and schedule (e.g. measures to control predation/grazing of mitigation plantings, temporary irrigation for plant establishment, replacement planting, structure maintenance/repair, etc.).

Please see sections 4 and 8.

d. Invasive species control plan (plant and animal).

Please see sections 4 and 8.

7) Monitoring Plan

a) Party(ies) responsible for monitoring. If more than one, identify primary party.

The Permittees understand the responsibility to monitor and maintain the upland restoration and wetland enhancement/restoration areas for compliance with permit conditions and establishment of successful conditions. The Permittees are responsible for monitoring unless and until a Property Owners Association (POA) is formed and responsibility for common area improvements for the CCTC are transferred to it. Please refer to 6.b for additional detail.

b) Data to be collected and reported, how often and for what duration (identify proposed monitoring stations, including transect locations on map).

Monitoring Data shall be collected annually or semi-annually and will include the following:

a. Color photographic prints taken from fixed reference points.
b. Estimates of percent survival of planted trees and shrubs based on thorough canvassing of each area.
c. Estimates of total percent cover of vegetation.
d. A list of recruited species with an estimate of relative abundance.
e. Total percent cover of desirable species based on visual estimates.
f. Percent cover of each nuisance and/or exotic species based on visual estimates.
g. Observations of wildlife use.
h. Visual observation of water quality and measurement of water depth.

Specific monitoring locations will be determined after mitigation area establishment and will be representative of the system being monitored.

c) Assessment tools and/or methods to be used for data collection monitoring the progress towards attainment of performance standard targets.

See above.

d) Format for reporting and monitoring data and assessing mitigation status.

Monitoring data will be reported in a tabular format. The report format will be designed to concisely summarize the site conditions and to document the extent to which the success criteria are being met.

e) Monitoring schedule

A Wetland Mitigation Completion Report shall be submitted to the Corps within 30 days of completing construction and planting of the wetland mitigation areas. The monitoring program shall be initiated with the date of the Corps field inspection being the construction completion date of the mitigation area.

The Permittee shall monitor the mitigation area until the criteria set forth in the Mitigation Success Criteria are met. Monitoring events shall occur between March 1 and November 30 of each year.

An Annual Wetland Monitoring Report shall be submitted upon the anniversary date of Corps approval to initiate monitoring. Annual reports shall provide documentation that a sufficient number of maintenance inspection/activities were conducted to maintain the mitigation area in compliance according to the Wetland Mitigation Success Criteria Condition above. The performance of maintenance inspections and maintenance activities will normally need to be conducted more frequently than the collection of other monitoring data to maintain the mitigation area in compliance with the Wetland Mitigation Success Criteria Condition above.

Termination of monitoring for the wetland mitigation area(s) shall be coordinated with the Corps by:

a. Notifying the Corps in writing when the criteria set forth in the Wetland Mitigation Success Criteria have been achieved;

b. Suspending all maintenance activities in the wetland mitigation area(s) including, but not limited to, irrigation and addition or removal of vegetation; and,

c. Submitting a monitoring report to the Corps one year following the written notification and suspension of maintenance activities

Upon receipt of the monitoring report, the Corps will evaluate the wetland mitigation site(s) to determine if the Mitigation Success Criteria have been met and maintained. The Corps will notify the Permittee in writing of the evaluation results. The Permittee shall perform corrective actions for any portions of the wetland mitigation area(s) that fail to maintain the criteria set forth in the Wetland Mitigation Success Criteria.

The mitigation area may be released from monitoring by the COE and reporting requirements and be deemed successful at any time during the monitoring period if the Permittee demonstrates that the conditions in the mitigation area have adequately replaced the wetland and surface water functions affected by the regulated activity and that the site conditions are sustainable.

8) Adaptive Management Plan

Management needs vary dramatically based on the proposed mitigation activities. Adaptive management will thus vary depending on those activities.

The Permittees shall undertake required maintenance activities within the wetland mitigation area(s) as needed at any time between mitigation area construction and termination of monitoring, with the exception of the final year. Maintenance shall include the manual removal of all nuisance and exotic species, with sufficient frequency that their combined coverage at no time exceeds the Wetland Mitigation Success Criteria.

- Alston Mitigation Site, Off-site restoration and enhancement area
- Alston Mitigation Site, Off-site upland preservation and management area
- On-site Wetland Creation area

a) Party(ies) responsible for adaptive management.

The Permittees will maintain management authority for adaptive management on the mitigation sites until such time as a CCTC Property Owners' Association (POA) is formed. At that time, responsibility will be transferred to the POA. The POA will have ongoing responsibility for common area improvements for the CCTC Regional Retail Center, including the Alston Mitigation Site and on-site mitigation areas. Funding will be generated by Common Area Maintenance (CAM) fees.

b) Identification of potential challenges (e.g., flooding, drought, invasive species, seriously degraded site, extensively developed landscape) that pose a risk to project success. Discuss how the design accommodates these challenges.

Alston Mitigation Site, Off-site restoration and enhancement area

Following initial site preparation and installation of native seed materials, most management on this site becomes adaptive. The general procedure is to have the site inspected monthly and to take necessary actions to address management needs as they come up.

The principal challenges to the restoration and enhancement (both wetland and upland) is invasive species. Drought and flooding could also be problems, but they are expected to be less problematic than nuisance species.

Nuisance species

When a site like the Alston Mitigation Site restoration and enhancement area is restored via sod removal, seeding with native vegetation, and selective planting, nuisance species invasion is a potential problem. Generally, nuisance invasion is due to species on the site that were not eliminated during site preparation or species found in the surrounding area. On this site, the species of greatest concern are 1) Bermuda grass, 2) bahia grass, 3) torpedo grass and 4) tropical

soda-apple, and 5) dog fennel. In the deeper wetland areas, cattails and primrose-willow could also be problematic.

The method of choice for controlling nuisance species is prevention. Site preparation (see section 4) focuses on eliminating the pasture grasses via repetitive herbiciding and discing. The existing sod will be stripped along with its roots and rhizomes. Any grass that comes up will be herbicided and tilled repeatedly until the site can be seeded. The latter will occur in late fall or early winter as that is when native seed can be harvested and spread.

Following seeding, the site will be inspected monthly, and any grass (or any other nuisance species) that appear will be selectively herbicided.

Dog fennel is a special challenge. It is a native pioneer species that generally appears in great abundance in the first few years after seeding. It generally disappears on its own was cover with desirable species increases. In the short term, it also acts as somewhat of a "nurse plant" and can provide shade for desirable young plants. Dog fennel is thus problematic only if is becomes so abundant that it shades out the desirable plants. It will be dealt with, as appropriate, by mowing or selective herbiciding (wicking) if it becomes overly abundant.

A monthly schedule of inspection and maintenance will enable elimination of any other nuisance species that appear before they become problematic.

After the first two years, burning may be substituted for some (or all) herbicide management.

Wild Hogs

The wild hog will be excluded from the restoration area. If hogs gain entry to the restoration/enhancement area, the hogs will be trapped, killed, and disposed of consistent with local and state regulations.

Flooding and Drought

Flooding is not anticipated to be a problem. This generally low, nearly flat site has been observed under high rainfall conditions and the vegetation that is to be planted can tolerate the anticipated maximum flood levels. The planting plan for plants that will be planted as young plants (not seeded) places plants in the wetlands according to anticipated depth and hydroperiod.

Drought is a greater challenge. Should drought occur, supplemental water (pumped from an existing pond or obtained from a local well) will be used temporarily and as needed to support the system until it is adequately established to handle drought conditions.

<u>Alston Mitigation Site, Off-site upland preservation and management area</u>

The natural preservation and management area is anticipated to be robust to most management challenges. The site is maintained currently by controlled burns. The natural areas will be inspected at least twice per year, and controlled burns will be scheduled as needed to keep the flatwoods in good condition. The schedule may be altered in the event of a wild fire.

Wild Hogs

The European wild hog digs extensively in hammocks and selected wetlands areas churning the soil and digging up the ground cover over large areas. In the Alston Mitigation Site area, the

feral hog is a problem species. Introduced from Europe, it digs up the ground flora of hammocks and wetlands while looking for food. A hog-damaged hammock or wetland looks plowed.

The wild hog will be excluded from the restoration area. Elsewhere, the best management is shooting or trapping. If hogs gain entry to the restoration/enhancement area, the hogs will be trapped, killed, and disposed of consistent with local and state regulations.

Wild Fire and Fire Suppression

Native wildlife and vegetation in Florida are adapted to a periodic fire, and certain habitats in Florida are wholly dependent upon periodic burns to maintain the health and viability of the vegetative communities and the resident animals, which in some cases may exist exclusively within specific habitats.

Wild fires could pose a problem to the success of the mitigation area if it results in overly hot fires or if the restoration/enhancement area burns before planted materials are sufficiently well established to recover from fire. Alternatively, fire suppression could lead to extreme fire hazard and loss of characteristic flatwoods and savanna plant communities.

Controlled fire and alternative mechanical treatments protect against wild fire and prevent the risks and natural community degradation that occur with fire suppression.

With this in mind, the Permittee will implement a periodic prescribed burn and mechanical treatment program designed to maintain habitat quality in the natural areas. The burn regime is described in detail in Section 4.

<u>On-site Wetland Creation areas</u>

These areas provide the greatest adaptive management challenges as the areas will be surrounded by developed areas and the general area around the CCTC is already developed and nuisance species are abundantly available to invade. Avoidance via appropriate site design and exclusion of invasive species from the site are considered to be the best controls, however active measures will be used if avoidance is not adequate to prevent nuisance species problems. The Permittee has developed an On-site Wetland Protection Plan that has been approved by Pasco County Appendix J).

Buffers (Avoidance)

Consistent with the SWFWMD regulations, buffers averaging 25 feet will be maintained around all wetland areas to provide an upland transition into the wetland areas and to protect the natural wetland systems from development impacts. A minimum 50-ft buffer will be maintained along Cypress Creek.

Buffers around wetlands serve to reduce the extent and intensity of secondary impacts. They help maintain water quality in the wetlands, minimize the extent to which fertilizers and pollutants enter the wetlands (typically causing nuisance species to proliferate), and to protect the wetlands as habitat for wildlife.

Because buffers are notoriously difficult to maintain in areas where residences and commercial sites abut them, management of buffers will focus on initial (development period) efforts that will facilitate and encourage ongoing maintenance of them for aesthetics. To this end, buffers that are not initially attractive may be augmented with native plants and will be managed

consistent with goals of maintaining water quality and quality of wetland habitat for wildlife. Species such as (but not limited to) wax myrtle (*Myrica cerifera*), sand cordgrass (*Spartina bakeri*), and Walter's viburnum (*Viburnum obovatum*) may be planted along the foot of the development pad and in the buffer itself. Alternatively, desirable natives may be planted on the rear of the development pad as part of the landscaping. If so planted, the plantings will be part of the overall landscape plan and contribute to meeting the quota of native landscape plants specified in the Pasco County Landscape Ordinance.

Buffers will be actively maintained in areas where they abut roadways and areas visible to mall customers. Maintenance will include removal of species that are generally considered to be unattractive or invasive such as but not limited to dog fennel (*Eupatorium capillifolium*) and exotic nuisance species such as air potato (*Dioscorea bulbifera*).

Buffers will be inspected annually or more frequently by a Qualified Environmental Professional (QEP) to determine needed management, if any. A QEP will provide oversight for maintenance activities conducted in the buffers.

Planting of Surface Water Management Pond Littoral Shelves (Avoidance)

Littoral shelves in the water management ponds on Cypress Creek Town Center will be planted. By planting, undesirable species (such as cattails), will have less opportunity to colonize the littoral shelves and there will thus be less seed source in the area from which cattails can invade the mitigation wetlands. Planting the littoral shelves will also provide a combination of combination of water quality enhancement, aesthetics, and wildlife habitat improvement. Species to be planted will be restricted to native species that will grow well under the anticipated hydrologic regimes. Littoral shelves will be subject to maintenance, monitoring, and contingency planning as provided in the ERP permit. Consistent with the DO, species to be planted will be native and may include, but not limited to, pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), fireflag (*Thalia geniculata*), and buttonbush (*Cepalanthus occidentalis*). Native species which recruit will be retained except that cattails (*Typha* spp.) will be removed (subject to SWFWMD approval)

Nuisance Species Removal (Adaptive management)

Non-native pest plants, such as Peruvian primrose-willow *(Ludwigia peruviana*), will be removed. Areas required by the Environmental Resource Permit (ERP) to have vegetative cover, will be planted with natives as described above to re-establish the level of vegetative cover required by the ERP. Although certain species are specifically identified in this paragraph, the entire list of plants listed by the Florida Exotic Pest Plant Council (FLEPPC) as Category I or Category II pest plants will be targeted for elimination and control.

Any which are planted for aesthetics or non-permit mandated reasons will be maintained in a manner consistent with the intent for planting.

Low Impact Stormwater Treatment Designs (Avoidance)

As a DRI Development Order (DO) Condition, the Permittee has committed to the implementation of "Low Impact Stormwater Treatment" designs (LID) within the mall footprint. These low-impact treatments are intended to capture runoff from the parking lots and improve water quality prior to any discharge into natural wetlands. They include standard procedures

such as grease baffles and retention in surface water management ponds. They increase treatment through combinations of early capture in parking lot swales, greater treatment volumes and increased residence time in treatment ponds relative to that required by ERP standards, and other measures with demonstrated potential to improve the quality and quantity of water retained on site and within on-site wetlands. Among the LID techniques that are to be limited is the use of native species which will help prevent the spread of nuisance species and help limit the need for nuisance species management in the mitigation wetlands.

c) **Discussion of potential remedial measures in the event mitigation does not meet performance standards in timely manner.**

Successful mitigation takes time. The intent is for mitigation to meet performance standards in a timely manner. Risk is reduced due to location (adjacent to natural lands) and planning for adequate time for site success.

d) Description of procedures to allow for modifications of performance standards if mitigation projects are meeting mitigation goals, but in unanticipated ways.

The mitigation procedures, especially those for the Alston Mitigation Site, are designed to improve wetland functions and values. Since seeding with native seeds is the restoration and enhancement method to be employed for most of the Alston Mitigation Site, the success criteria have been written to allow flexibility. The intent is that the species present in the seed mix that are best adapted to the conditions that develop will be the species that succeed.

Should the unexpected occur and a successful mitigation project develop that does not meet the success criteria, a Qualified Environmental Professional (QEP) will meet with the various permitting agencies to modify the conditions of success to meet the unanticipated but desirable results.

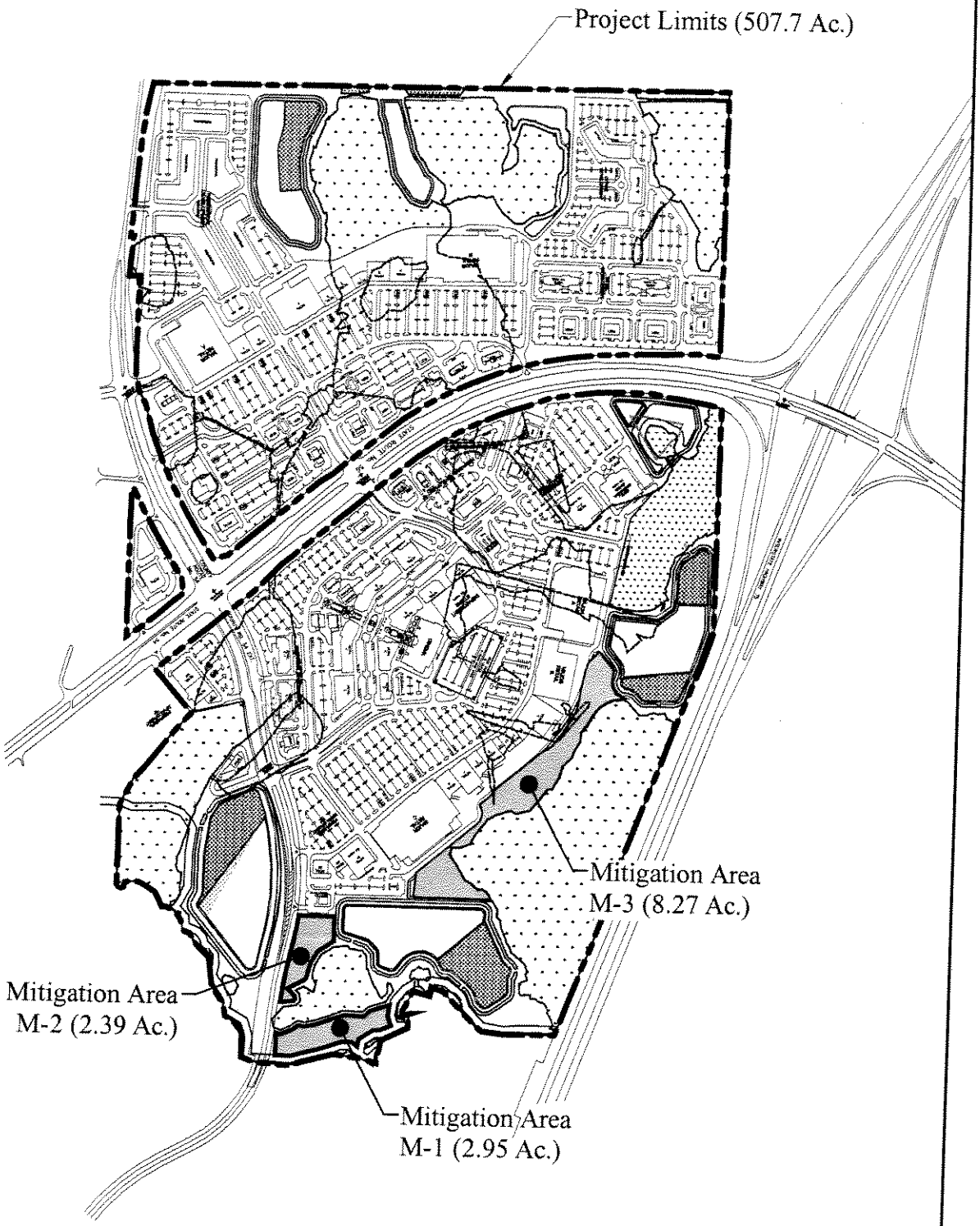
9) Financial Assurances

a) **For each of the following, identify party(ies) responsible to establish and manage the financial assurance, the specific type of financial instrument, the method used to estimate assurance amount, the date of establishment, and the release and forfeiture conditions:**
   1) **Construction phase**
   2) **Maintenance**
   3) **Monitoring**
   4) **Remedial measures**
   5) **Project success**

b) **Types of assurances (e.g., performance bonds, irrevocable trusts, escrow accounts, casualty insurance, letters of credit, etc.).**

c) **Schedule by which financial assurance will be reviewed and adjusted to reflect current economic factors.**

Appendix J provides draft financial assurance documents. The anticipation is that final versions of these documents will be available within the next 30 days.



CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 57 OF 72

1000 0 500 1000 1 inch = 1000 ft.

Figure 10

Figure 10
Cypress Creek Town Center
Site Plan

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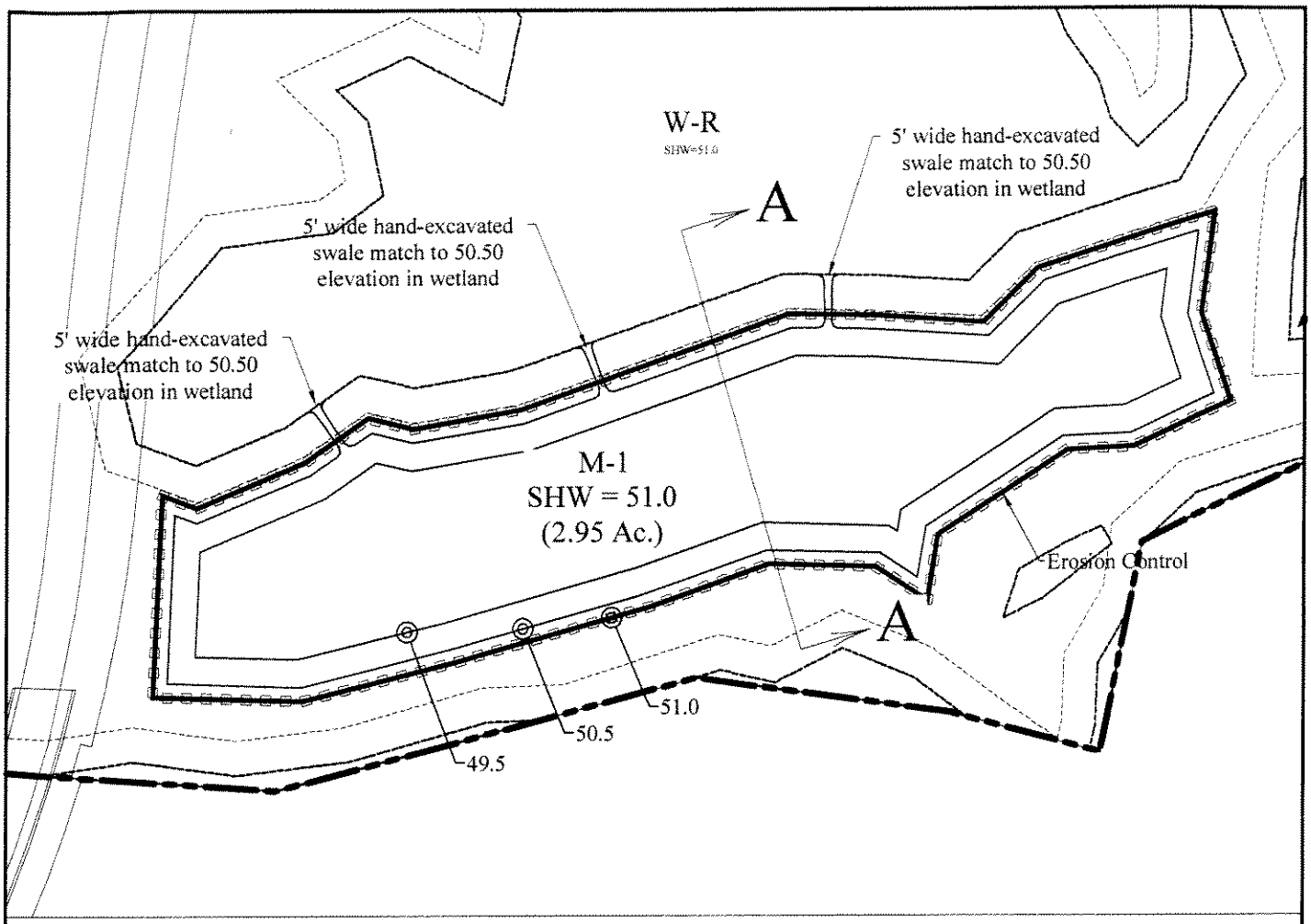

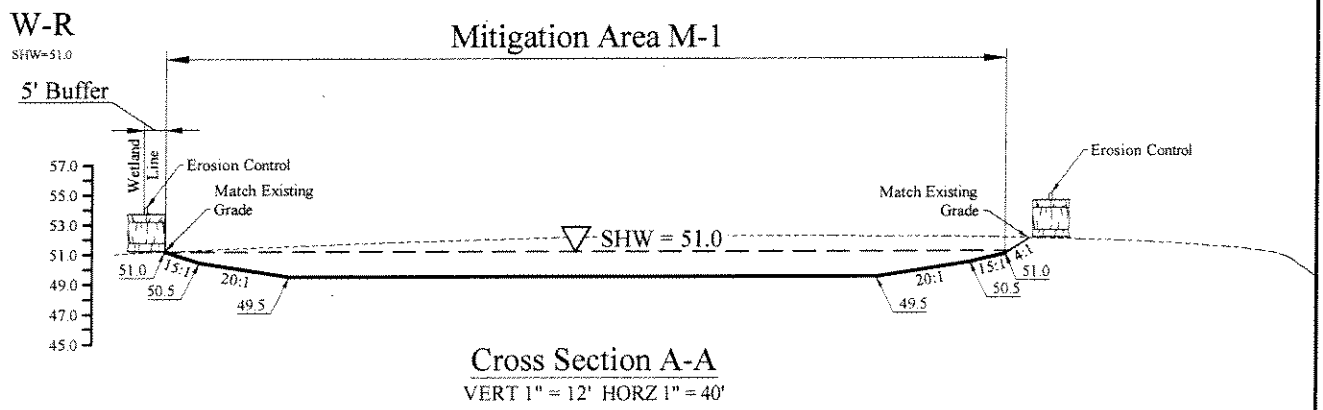

Cross Section A-A
VERT 1" = 12' HORZ 1" = 40'

120 0 60 120 1 inch = 120 ft.

Figure 23

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 58 OF 72

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Figure 23
Cypress Creek Town Center
Mitigation Area M-1 Grading Plan

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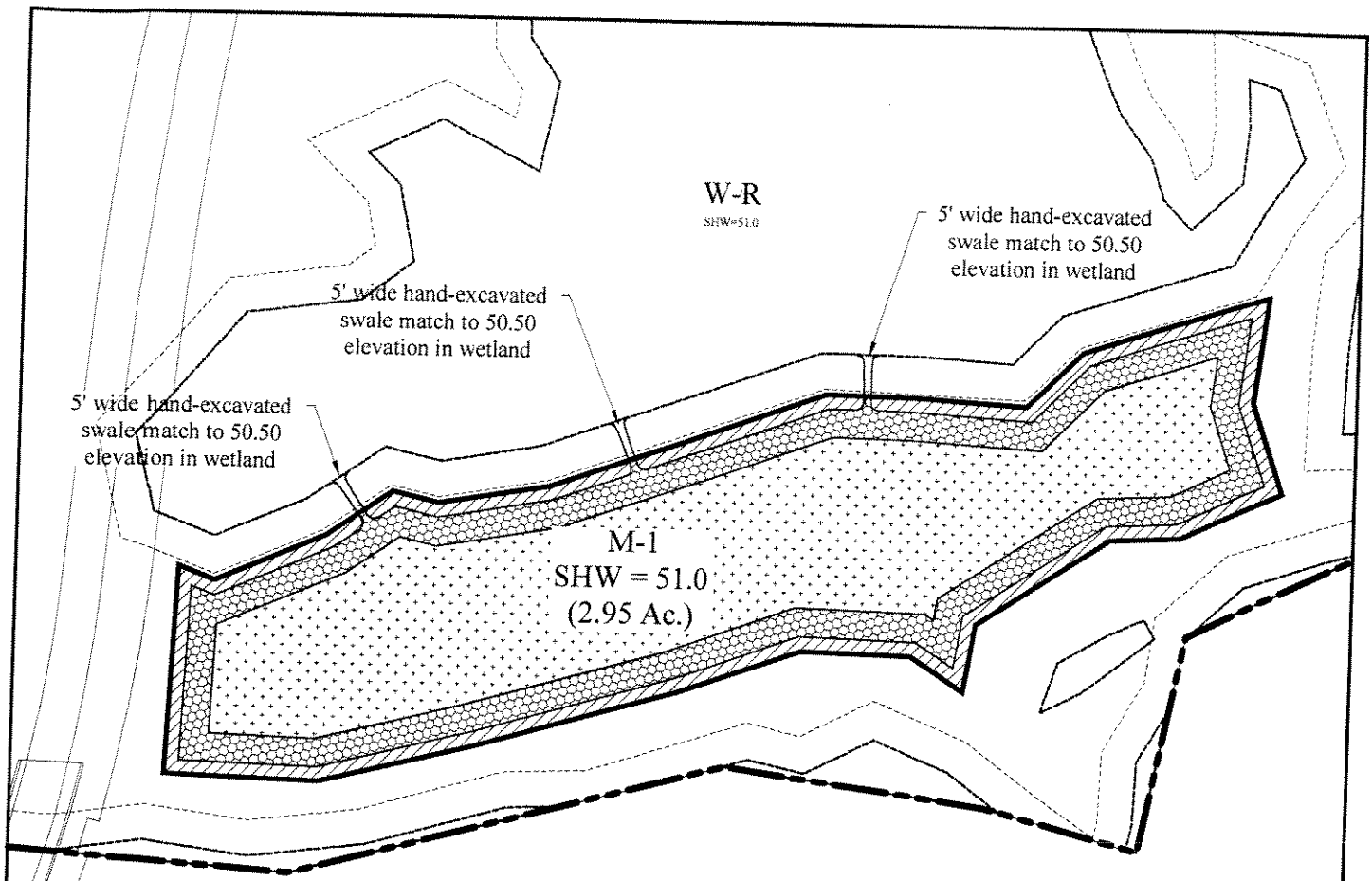

Cypress Creek Town Center On-Site Mitigation Area - M1

Elevation	Scientific Name	Common Name	Area	Quantity	Size	Spacing
49.50	*Pontederia cordata*	pickerelweed	1.68	4,066	1 qt. Equiv	3' o.c.
	Sagittaria lancifolia	lance-leaved arrowhead		4,066	1 qt. Equiv	3' o.c.
	Taxodium Ascendens	Pond Cypress		732	3 Gal.	10' o.c.
49.5 to 50.50	*Panicum hemitomon*	maidencane	0.83	1,339	1 qt. Equiv	3' o.c.
	Canna Flacida	canna lilly		1,339	1 qt. Equiv	3' o.c.
	Iris Hexagona	prairie iris		1,339	1 qt. Equiv	3' o.c.
	Taxodium Ascendens	Pond Cypress		362	3 Gal.	10' o.c.
50.5 to 51.00	*Panicum hemitomon*	maidencane	0.44	0	1 qt. Equiv	3' o.c.
	Ludwigia repens	creeping seedbox		1,339	1 qt. Equiv	3' o.c.
	Spartina bakerii			1,339	1 qt. Equiv	3' o.c.
	Taxodium Ascendens	Pond Cypress		192	3 Gal.	10' o.c.
		Total:	2.95			

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

120 0 60 120 1 inch = 120 ft.

Figure 23a

Figure 23a
Cypress Creek Town Center
Mitigation Area M-1 Planting Plan

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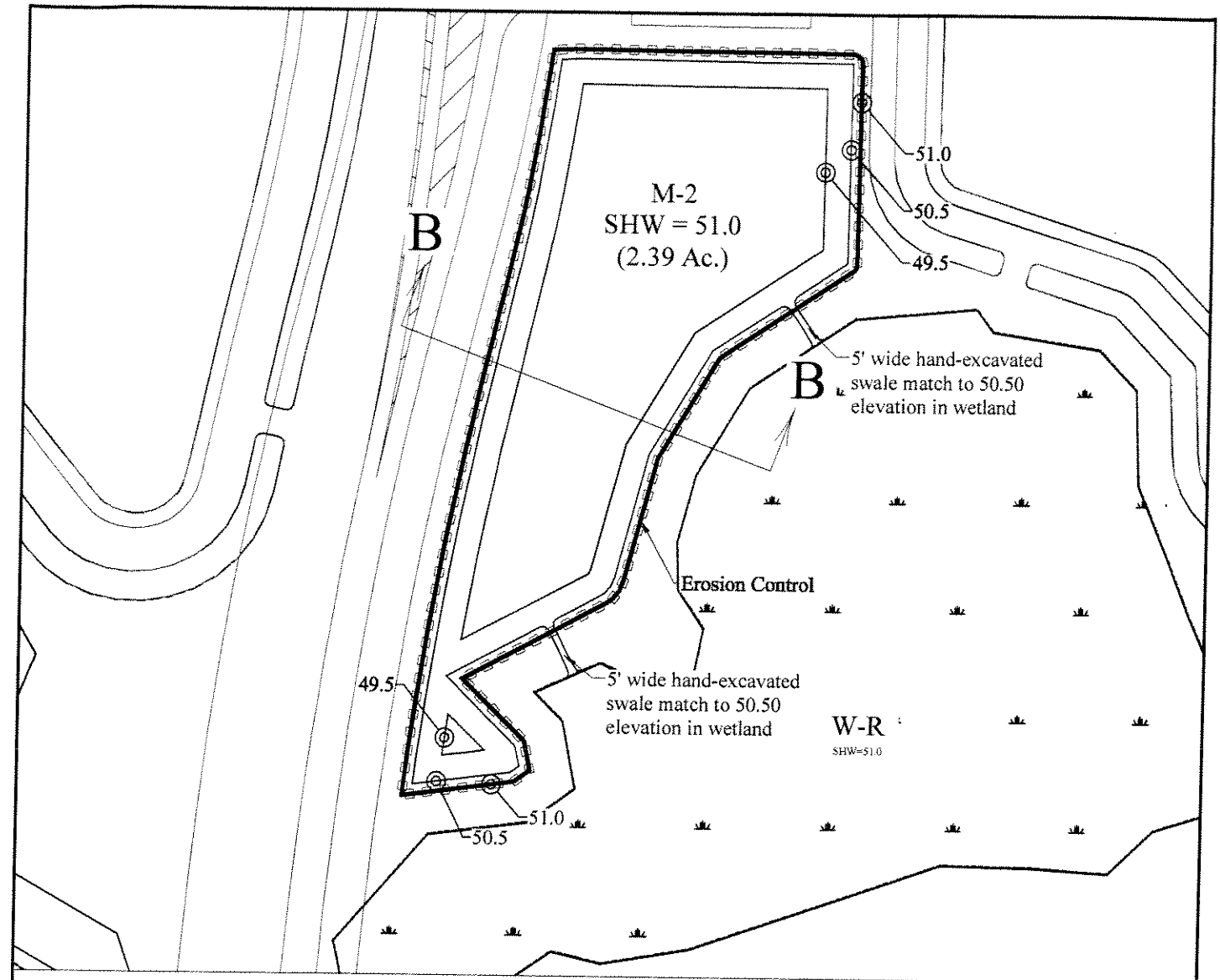

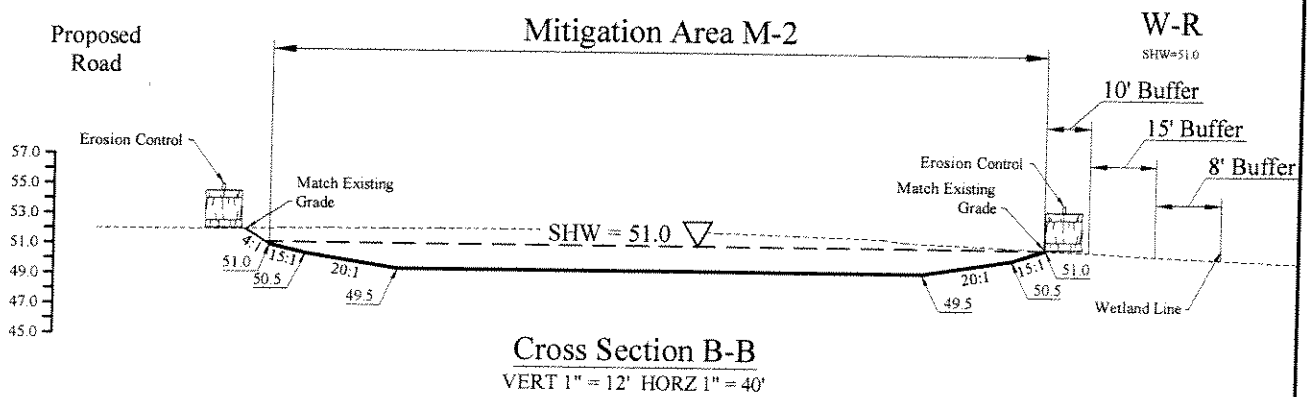

Cross Section B-B
VERT 1" = 12' HORZ 1" = 40'

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

120 0 60 120 1 inch = 120 ft.

Figure 24

ATTACHMENT 3
SHEET 60 OF 72

Figure 24
Cypress Creek Town Center
Mitigation Area M-2 Grading Plan

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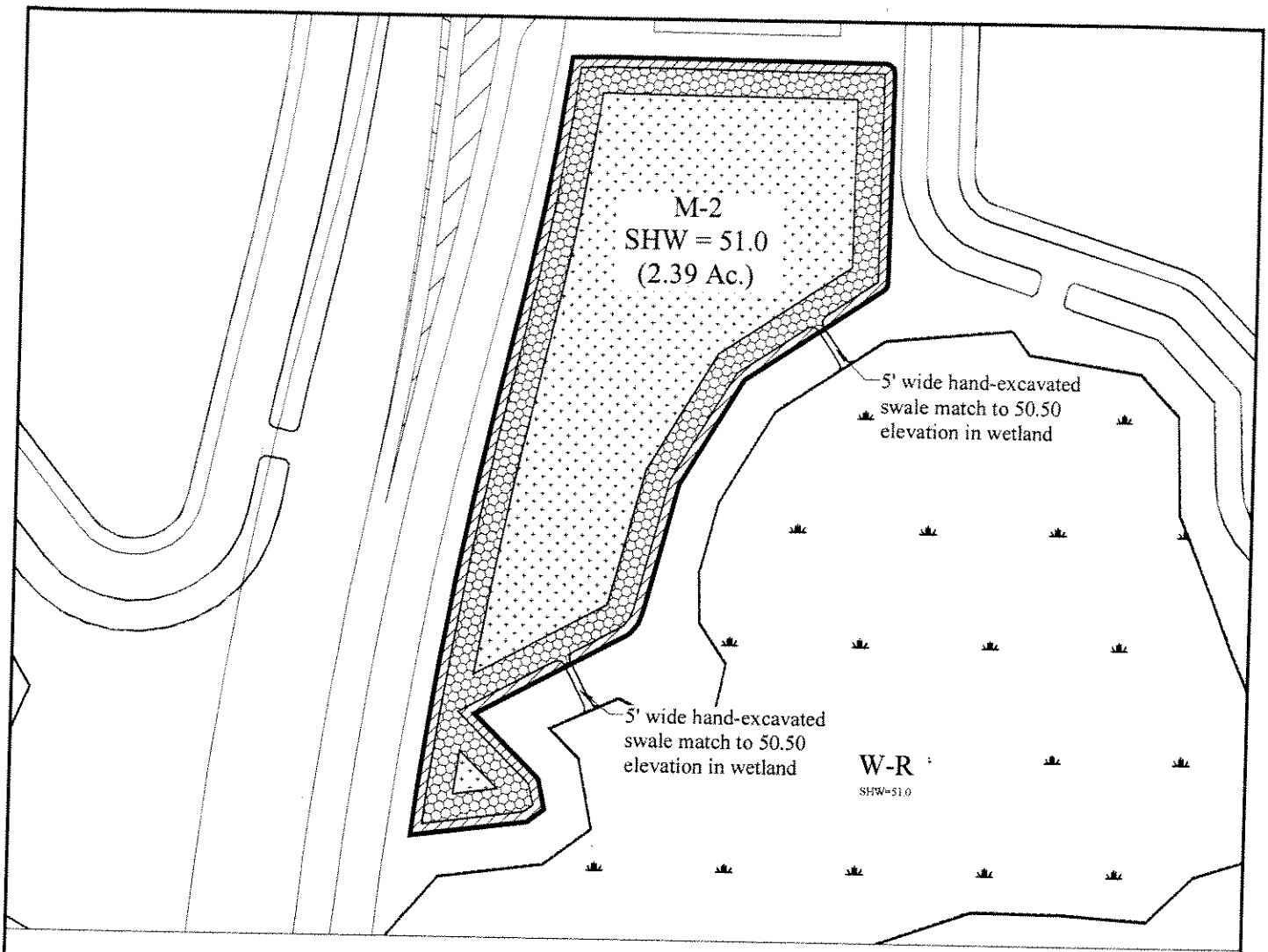

Cypress Creek Town Center On-Site Mitigation Area - M2

Elevation	Scientific Name	Common Name	Area	Quantity	Size	Spacing
49.50	*Pontederia cordata*	pickerelweed	1.40	3,412	1 qt. Equiv	3' o.c.
	Sagittaria lancifolia	lance-leaved arrowhead		3,412	1 qt. Equiv	3' o.c.
	Taxodium Ascendens	Pond Cypress		614	3 Gal.	10' o.c.
49.5 to 50.50	*Panicum hemitomon*	maidencane	0.70	1,129	1 qt. Equiv	3' o.c.
	Canna Flacida	canna lilly		1,129	1 qt. Equiv	3' o.c.
	Iris Hexagona	prairie iris		1,129	1 qt. Equiv	3' o.c.
	Taxodium Ascendens	Pond Cypress		305	3 Gal.	10' o.c.
50.5 to 51.00	*Panicum hemitomon*	maidencane	0.29	0	1 qt. Equiv	3' o.c.
	Ludwigia repens	creeping seedbox		1,129	1 qt. Equiv	3' o.c.
	Spartina bakerii			1,129	1 qt. Equiv	3' o.c.
	Taxodium Ascendens	Pond Cypress		129	3 Gal.	10' o.c.
		Total:	2.39			

120 0 60 120 1 inch = 120 ft.

Figure 24a

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 61 OF 72

Figure 24a
Cypress Creek Town Center
Mitigation Area M-2 Planting Plan

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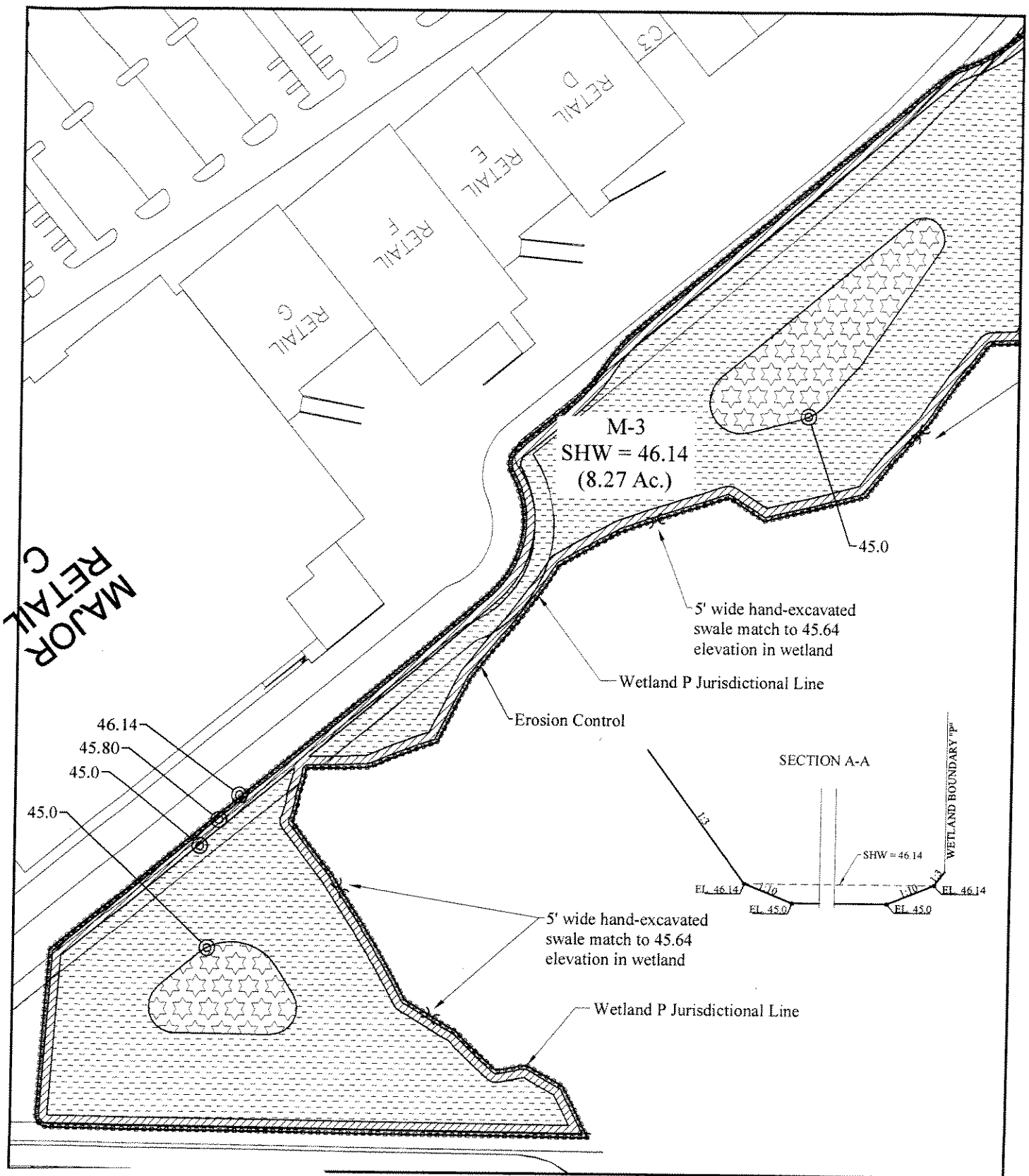

Figure 24b

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 62 OF 72

Figure 24b
Cypress Creek Town Center
Mitigation Area M-3 Planting Plan

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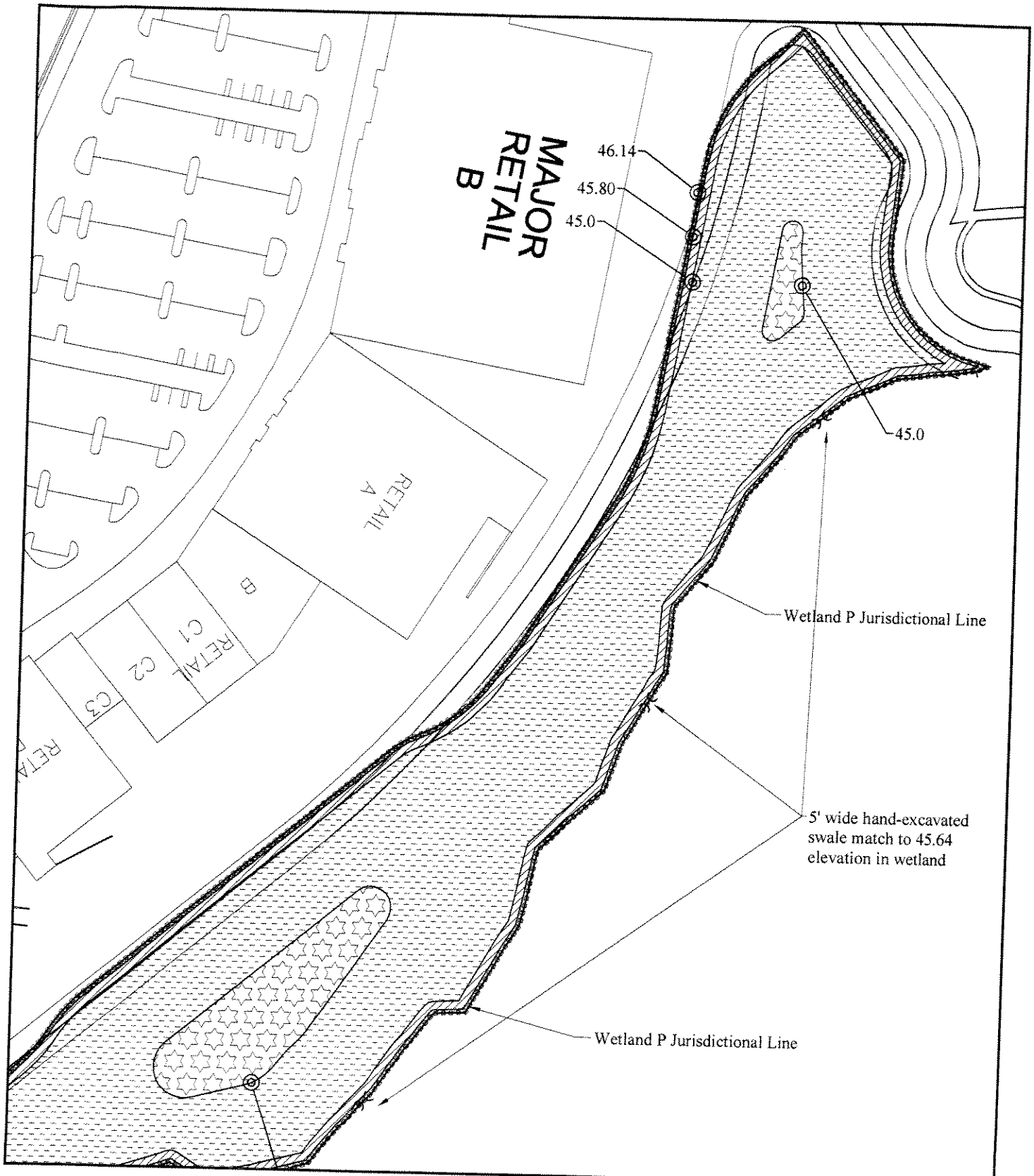

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 63 OF 72

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120 0 60 120 1 inch = 120 ft.

Figure 24c

Figure 24c
Cypress Creek Town Center
Mitigation Area M-3 Planting Plan

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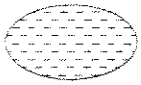
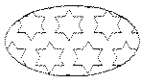
Cypress Creek Town Center On-Site Mitigation Area - M-3

	Elevation	Scientific Name	Common Name	Area	Quantity	Size	Spacing
	45.00	*Pontederia cordata*	pickerelweed	6.21	15028	1 qt. Equiv	3' o.c.
		Sagittaria lancifolia	lance-leaved arrowhead		15028	1 qt. Equiv	3' o.c.
	45.00	*Pontederia cordata*	pickerelweed	0.69	1670	1 qt. Equiv	3' o.c.
		Sagittaria lancifolia	lance-leaved arrowhead		1670	1 qt. Equiv	3' o.c.
		Cephalanthus occidentalis	buttonbush		1202	1 Gal.	5' o.c.
	45.00 to 45.80	*Panicum hemitomon*	maidencane	0.96	4646	1 qt. Equiv	3' o.c.
	45.8 to 46.14	*Spartina bakerii*	sand cordgrass	0.24	1162	1 qt. Equiv	3' o.c.
	45.80 to 46.14	*Spartina bakerii*	sand cordgrass	0.17	823	1 qt. Equiv	3' o.c.
		*Taxodium Ascendens**	Pond Cypress		74	3 Gal.	10' o.c.
			Total:	8.27			

* This is a herbaceous wetland creation area, these trees are being planting on the edge of the area for aesthetics, to discourage mowing, and to act as perches to encourage wood stork use of the area. The survival of these trees is not necessary for this area to be considered successful.

Figure 22b
Cypress Creek Town Center
Mitigation Area M-3 Planting Plan

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PLANTING OF SURFACE WATER POND LITTORAL SHELVES AND OPEN WATER AREAS WITHIN 300 FEET OF CYPRESS CREEK

The Permittee is committed to planting the littoral shelves of surface water management ponds so that they will provide habitat suitable as foraging areas for wading birds (specifically the wood stork). These littoral shelves occupy 35 percent of the total area of the ponds, hence providing approximately 13.20 acres of wetland habitat. These commitments have been made to Pasco County (see Excerpt 1) and to the SWFWMD (see Excerpt 2). The developer is providing a littoral shelf maintenance plan to the SWFWMD that is consistent with the County's desire that the littoral shelves be maintained in native wetland plants.

In addition, the SWFWMD management plan for littoral shelves includes planting the outer edges of these shelves with species adapted to deeper water (Excerpt 2). The ponds within 300 feet of Cypress Creek are shallow (approximately 3 feet deep), and it would be appropriate to plant the deeper water species throughout the non-littoral shelf area (2.81 acres) of the pond areas that is within 300 feet of the creek. By planting these areas, the effective width of the corridor along Cypress Creek would be expanded to be at least 300 feet wide. The applicant will plant spatterdock and/or water lily with water lily which are marsh species that are used by a variety of wildlife as shelter (amphibians, fish), perching/resting platforms (wading birds), or sources of nest building materials (selected birds, small mammals). By providing habitat for prey species, these ponds will also improve habitat for small mammals (raccoons) and wading birds which will forage from pond edges.

Excerpt 1 -- On-Site Wetland Protection Plan -- as approved by Pasco County

3.2 Planting of Surface Water Management Pond Littoral Shelves

Some littoral shelves on Cypress Creek Town Center will be planted to achieve a combination of water quality enhancement, aesthetics, and wildlife habitat creation. Species to be planted will be restricted to native species that will grow well under the anticipated hydrologic regimes. Littoral shelves will be subject to maintenance, monitoring, and contingency planning as provided in the ERP permit. Consistent with the DO, species to be planted will be native and may include, but not limited to, pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), fireflag (*Thalia geniculata*), and buttonbush (*Cephalanthus occidentalis*). Native species which recruit will be retained except that cattails (*Typha* spp.) will be removed from any littoral shelf that is visible from roadways or parking areas used by commercial users and residents; cattails will be retained as a native species useful to water quality treatment in areas visible only to maintenance uses unless they are adjacent to on-site creation areas or ponds with littoral shelves, in which case, they will be removed to prevent spread by seed.

Non-native pest plants, such as Peruvian primrose-willow *(Ludwigia peruviana)*, will be removed. Areas required by the ERP to have vegetative cover, will be planted with natives as described above to re-establish the level of vegetative cover required by the ERP.

Any species that are planted for aesthetics or non-permit mandated reasons will be maintained in a manner consistent with the intent for planting.

Excerpt 2 -- as prepared for the SWFWMD – to be submitted as a permit modification to be consistent with the above Pasco County plan

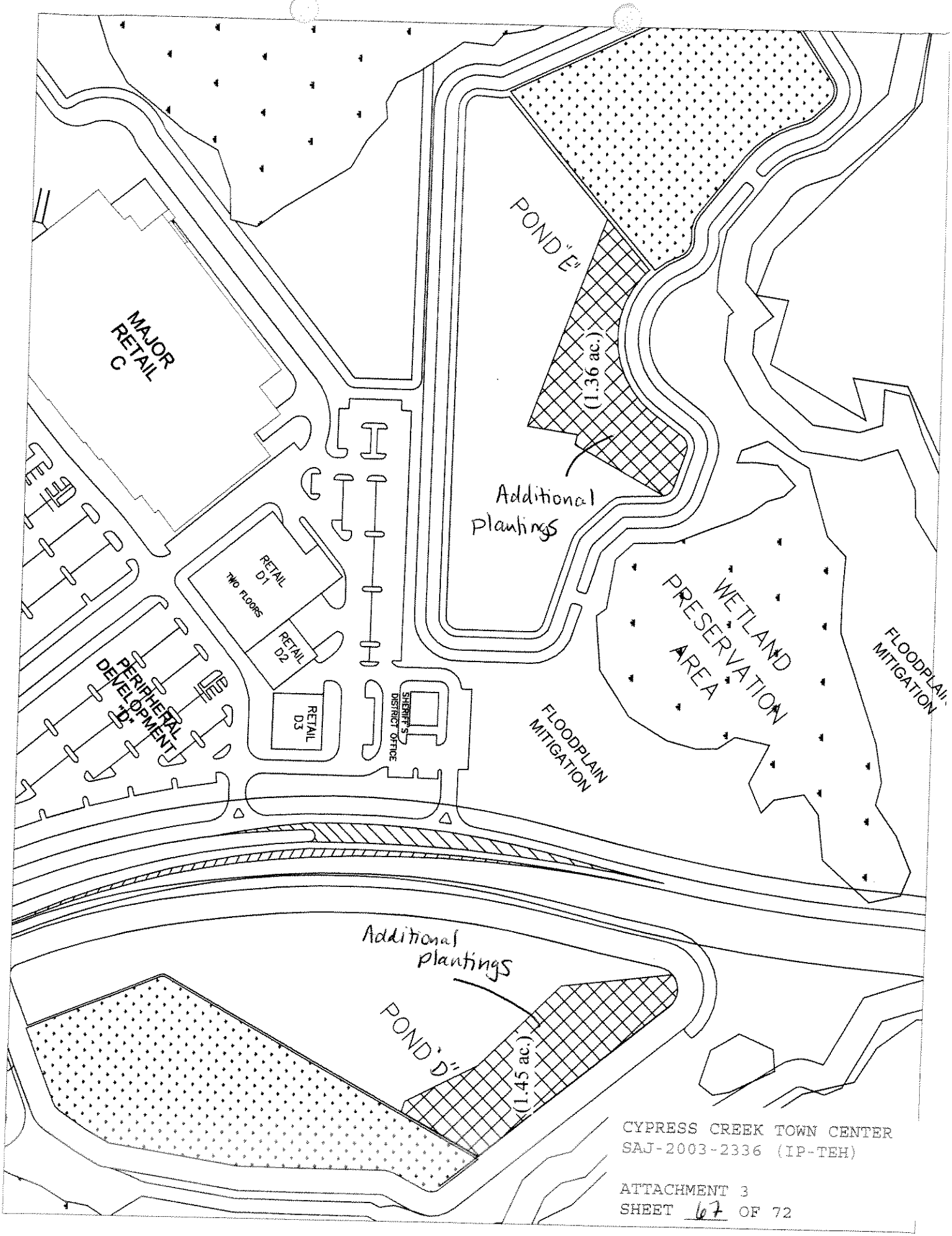
2.1 Planting of Surface Water Management Pond Littoral Shelves

Maintenance of littoral shelves and shallower parts of surface water management ponds can be greatly facilitated by planting of desirable species. The appropriate species are those that are fast growing and that form dense stands such that they sequester dissolved nutrients and other ions within their biomass. The appropriate species are also those that form dense stands and which therefore discourage the growth of invasive non-native species.

The littoral shelves of wet detention ponds will be planted with native species. Consistent with the Development of Regional Impact (DRI) development order, species to be planted will be native and may include, but are not limited to, pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia, S. latifolia*), spikerush (*Eleocharus cellulosa, E. equisetoides*), fireflag (*Thalia geniculata*), bulrush (*Scirpus californicus*), and buttonbush (*Cephalanthus occidentalis*). Herbaceous species will dominate. Herbaceous species will be planted on 3-foot centers (4840/acre). In addition to the above, species that can survive deeper water such as, but not limited to, spatterdock (*Nuphar lutea*) and water lily (*Nymphaea odorata, N. mexicana*) may be planted on the deeper edges of littoral shelves such that they can spread across the water surface and provide additional treatment.

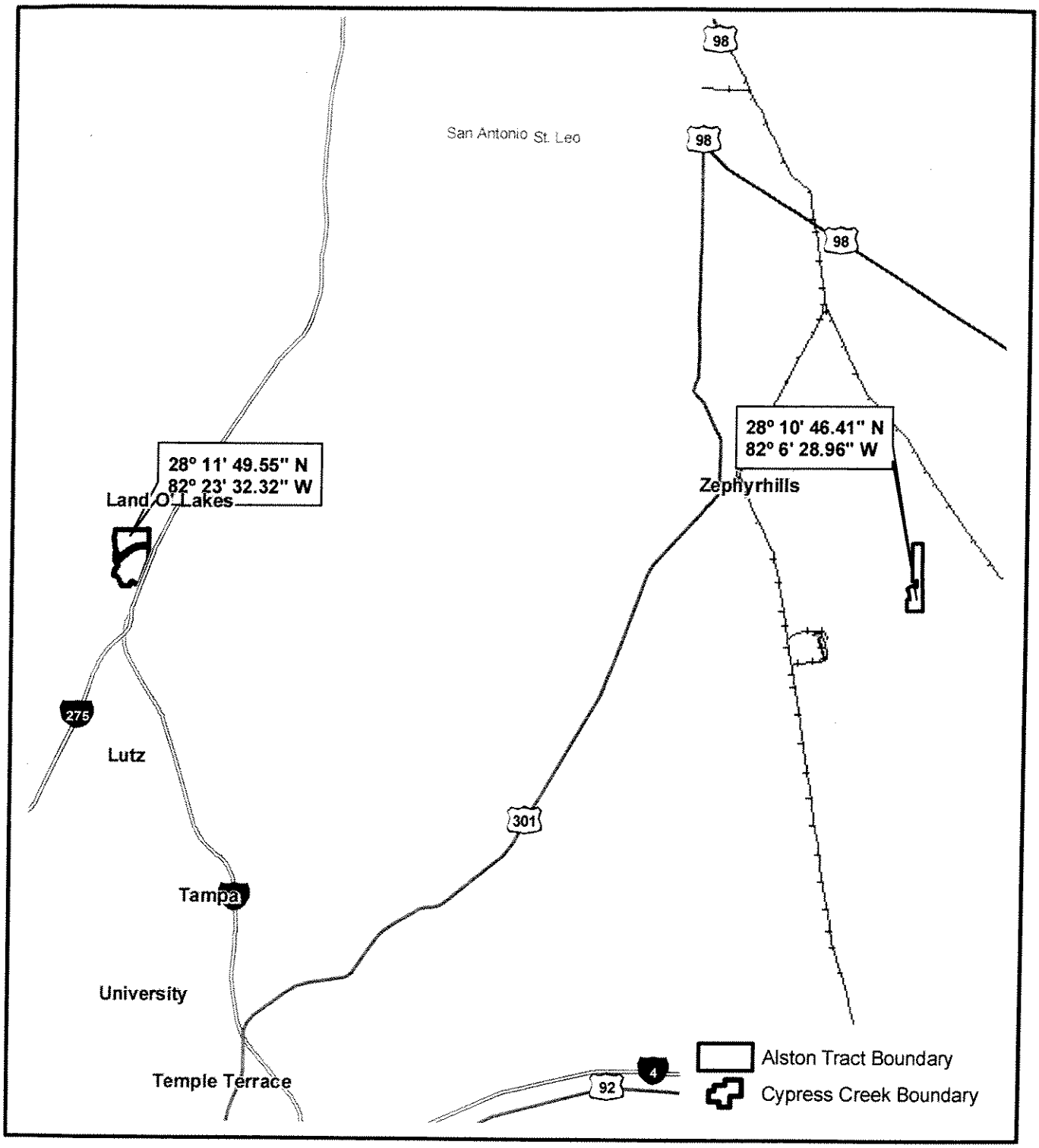
Note: the Permittee will commit to planting spatterdock and water lily on 6-ft centers in the area of surface water management pond within 300 ft of Cypress Creek.

Pond ID	Littoral Shelf Area	Additional Area of Planting within 300 feet of Cypress Creek
A	2.58	
C	3.18	
D	3.81	1.45
E	3.63	1.36
TOTAL:	13.20	2.81



CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 67 OF 72



CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 68 OF 72

Figure 23
Alston Mitigation Site
Pasco County, Florida
Location Map

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Suite 180
Tampa, Florida 33619
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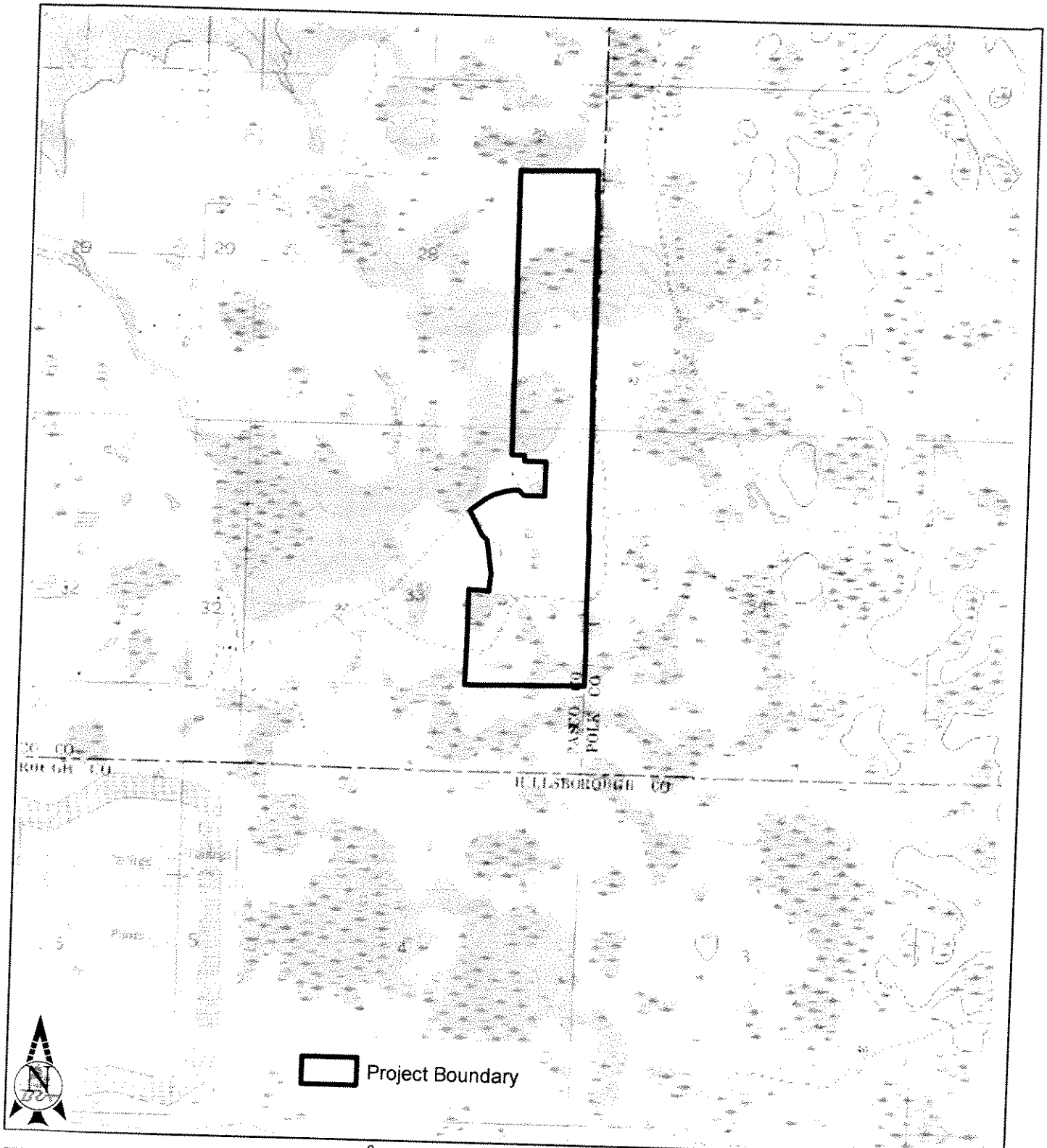
www.biologicalresearch.com



CYPRESS CREEK TOWN CENTER
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ATTACHMENT 3
SHEET 69 OF 72

Figure 27
Alston Mitigation Site
Pasco County, Florida
USGS QUAD Map

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Tampa, Florida 33619
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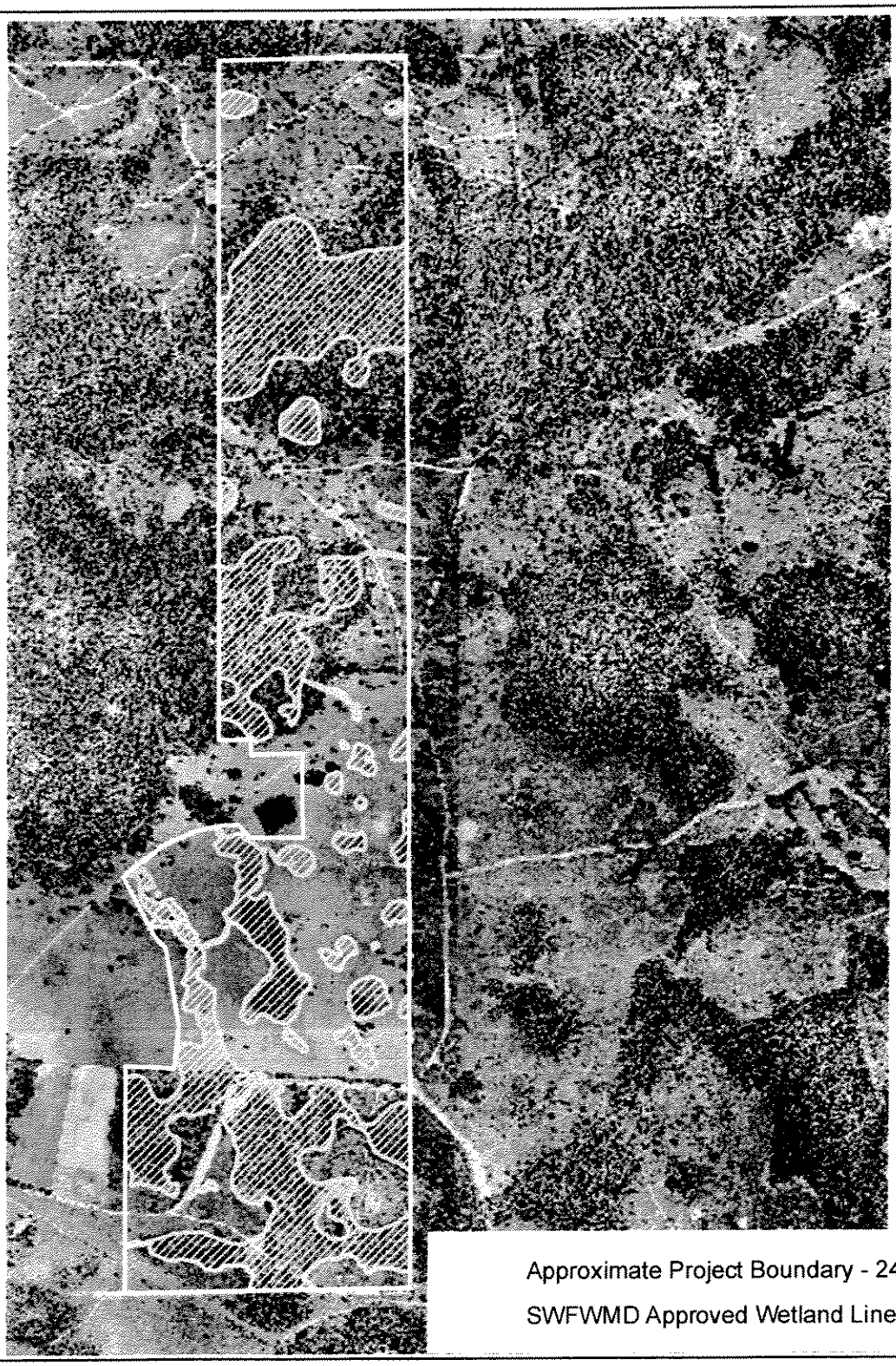
www.biologicalresearch.com



Approximate Project Boundary - 249.1 ac.

SWFWMD Approved Wetland Lines - 85.1 ac.

1000 2000 3000 Feet

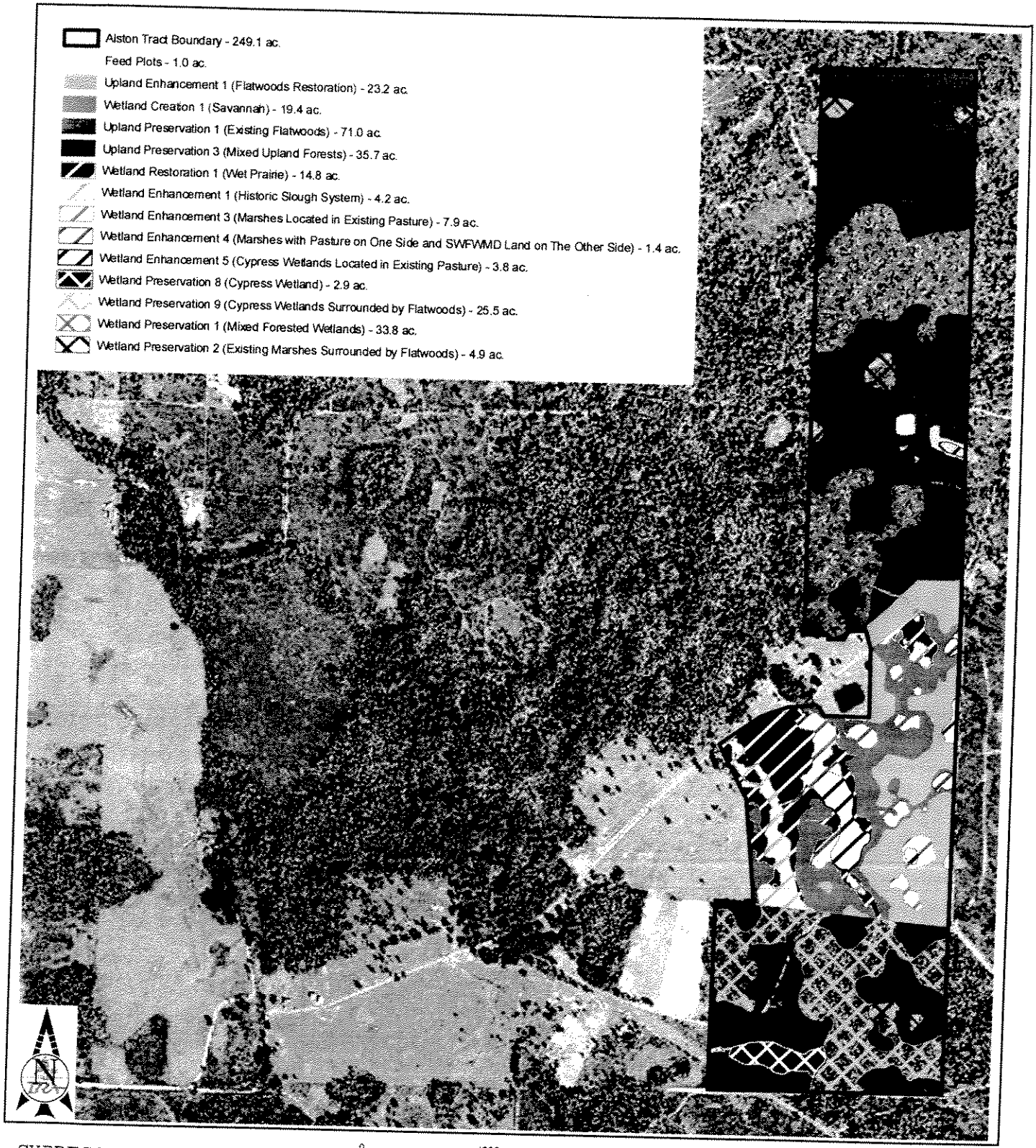
Image: 2005 Aerials Express Inc
1 inch equals 1010 feet

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 70 OF 72

Figure 25
Alston Property
Pasco County, Florida
Wetland Map

Biological Research Associates
3916 US Highway 301N
Suite 180
Tampa, Florida 33619
813-664-4508 FAX 813-664-4440
www.biologicalresearch.com



CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 71 OF 72

Figure 29
Alston Mitigation Site
Hillsborough County, Florida
Wetland Mitigation Plan

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Suite 186
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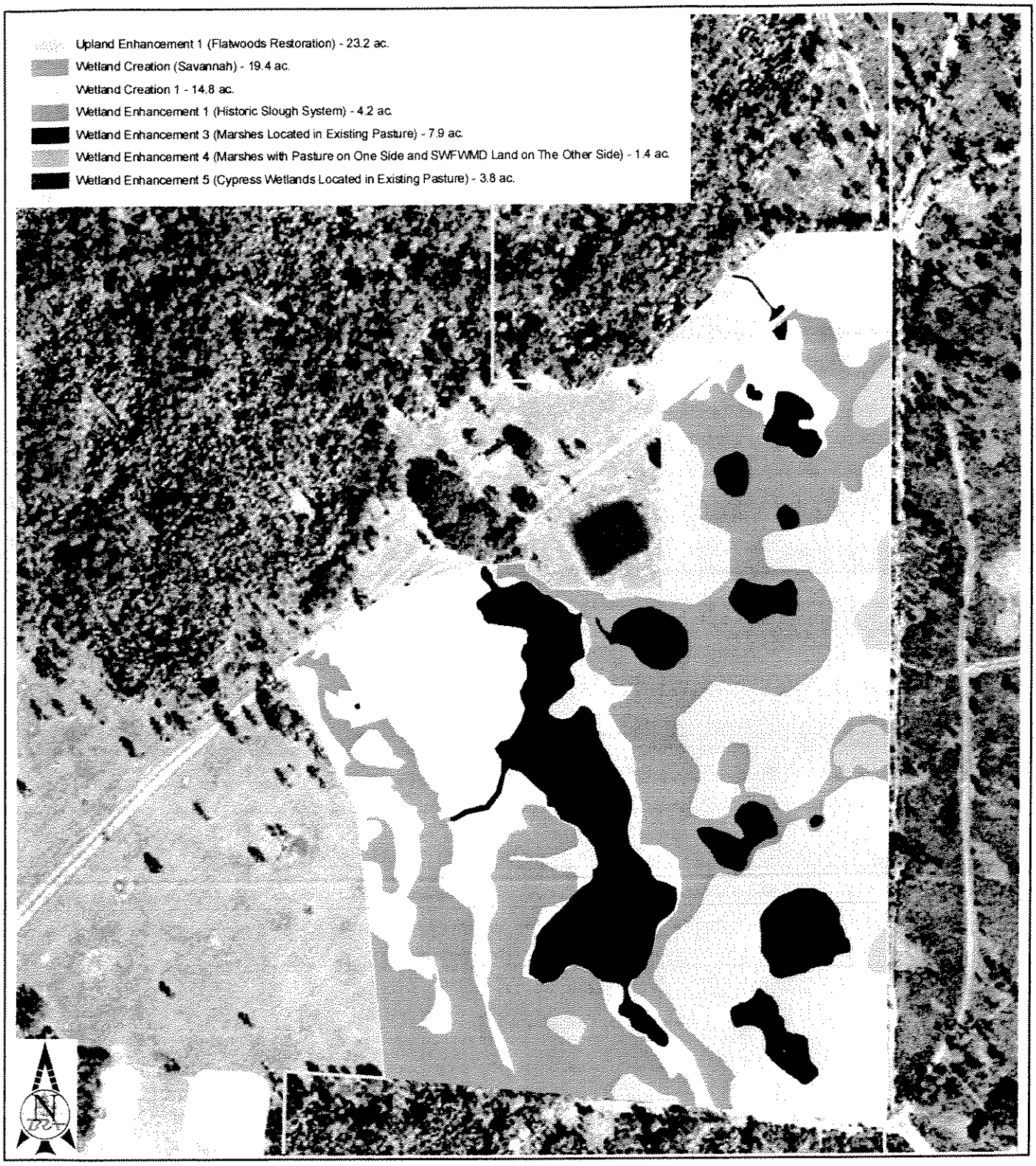

CYPRESS CREEK TOWN CENTER
SAJ-2003-2336 (IP-TEH)

ATTACHMENT 3
SHEET 72 OF 72

Figure 30
Alston Mitigation Site
Hillsborough County, Florida
nd Restoration, Creation & Enhancement Areas
Proposed in Existing Pastures

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ATTACHMENT 4

SURFACE WATER QUALITY MONITORING PLAN

CYPRESS CREEK TOWN CENTER
SURFACE WATER QUALITY
MONITORING PLAN

Prepared for:

Mr. Thomas P. Schmitz, PE
President of Design & Construction
The Richard E. Jacobs Group
25425 Center Ridge Road
Cleveland, Ohio 44145-4122

26 February 2007

Prepared by:

Biological Research Associates
Environmental Consultants

Douglas J. Durbin, Ph.D.
Senior Water Resource Analyst/Vice President

Shirley R. Denton, Ph.D., CEP
Vice President/Senior Ecologist

1.0 INTRODUCTION

The Cypress Creek Town Center development is located in the southwest quadrant of the intersection of State Road 56 and Interstate 75 in Pasco County, Florida. The Development Order issued for Cypress Creek Town Center requires the development and implementation of a surface water quality monitoring plan. This plan will be implemented prior to site development to characterize baseline conditions and will continue through site buildout (scheduled as 2011 in the Development Order), and for five years thereafter. As development progresses, this plan may be modified to account for changes in site drainage resulting from the stormwater management system accompanying construction. The plan also provides for follow-up sampling in the event the regular sampling indicates conditions worthy of concern.

This plan does not address turbidity monitoring in surface waters adjacent to active earthmoving or construction areas. Such monitoring may be required to ensure compliance with water quality standards and is expected to follow a separate schedule as stipulated by applicable permits (e.g., NPDES Permit for Stormwater Discharge from Large and Small Construction Activities pursuant to Chapter 62-621.300(4) F.A.C) or by agency policies and/or personnel. Similarly, it does not address monitoring of other potential contaminants directly associated with construction equipment and practices since those are also regulated under NPDES construction permits and addressed through best management practices and continuous site reviews by construction oversight personnel. This monitoring program targets broad-scale, continuous and/or long-term changes in water quality that might result from development, and the likelihood that this program would detect transient, short-term events caused by specific construction activities or events is very small.

The approved Pasco County Development Order for this project includes a number of special considerations expected to augment typical surface water quality protection. These are clearly identified in the Condition 5.c.(8)(a). Principal among the water quality protection considerations is the use of stormwater treatment ponds that will treat 50 percent more volume than standard stormwater ponds. As a result of this additional treatment volume, the stormwater ponds are expected to discharge only rarely under average rainfall conditions, and to discharge only for short periods of time, thus minimizing the potential for any water quality effects on the receiving waters.

2.0 SURFACE WATER SAMPLING LOCATIONS

The primary surface water feature associated with the site is Cypress Creek, which borders the development parcel along its southern edge. Sampling locations were chosen along this waterway to characterize water in Cypress Creek as it flows southeasterly along the property before passing under Interstate 75. Three stations on Cypress Creek will be monitored (see Figure 1):

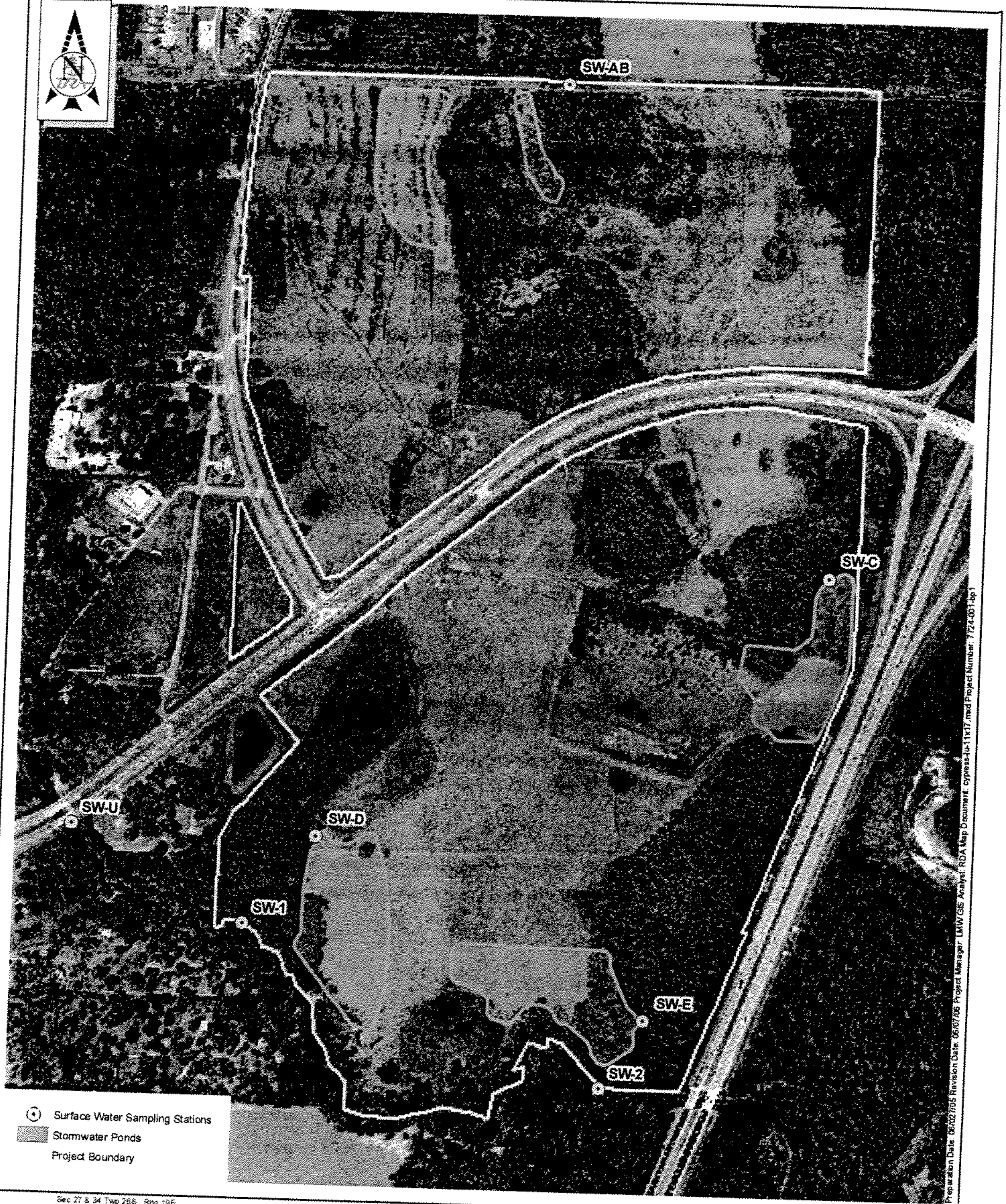
- SW-U – Cypress Creek at SR 54 (28.18556 N, -82.40083 W). This location is well upstream of the development site and will be used to characterize water quality in the stream prior to any potential effects from the site. There is a USGS stream gauge at this location and water quality samples are periodically collected from that station, with the data published at http://nwis.waterdata.usgs.gov/fl/nwis/qwdata?search_site_no=02303420. Samples will be collected on the downstream side of the SR 54 bridge so that any effects of the bridge on water quality are included as part of the "background" conditions of this upstream reference station.

- SW-1 – Cypress Creek at the southwest corner of the site, generally upstream of all development activities (28.18519 N, -82.39841 W). Sampling will be conducted near the unusually-shaped cypress tree shown in Figure 2A, which was selected as a field marker of the sampling point.

- SW-2 – Cypress Creek near the southeast corner, downstream of all development activities (28.18258 N, -82.39112 W). Sampling will be conducted near a cypress tree with a very broad buttress as shown in Figure 2B, which was selected as a field marker of the sampling point.

Four stormwater ponds (A, C, D and E) will be constructed to treat runoff from the developed area. At the north end of the parcel, just east of Pond A are two wetlands with an intervening area of higher ground. This higher area (referred to as "B" during stormwater plan development) is to be scraped down to provide supplemental storage and treatment of water leaving Pond A, before it exits the northern edge of the development site. After the ponds are constructed, monitoring will be conducted just below the discharge structures of Ponds C, D and E (Stations SW-C, SW-D and SW-E), and just below the ultimate discharge structure from the wetland treatment area receiving water from Pond A (Station SW-AB). See Figure 1 for locations of these four outfall monitoring stations. Sampling from these discharge points will only be conducted when discharge is present.

As site development proceeds, one or more stations may be relocated to better characterize surface water associated with the site. Such changes will be noted in monitoring reports, as applicable.



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Cypress Creek Town Center
Surface Water Sampling Stations
Pasco County, FL

Biological Research Associates

Figure 2A. Cypress tree located on bank of Cypress Creek at approximately 28.18519 N, -82.39841 W – used as field marker for Station SW-1.

Figure 2B. Cypress tree located on bank of Cypress Creek at approximately 28.18258 N, -82.39112 W – used as field marker for Station SW-2.

3.0 SAMPLING SCHEDULE

The "regular" monitoring under this plan can generally be divided into three time periods (a) Baseline Monitoring (prior to any construction activities) began in early 2007 and will continue until site development begins (as determined by the developer) (b) Construction Monitoring (during all site development activities) will immediately follow the Baseline Monitoring as construction begins and will continue through the construction period, and (c) Post-Construction Monitoring will begin after construction activities are completed (as determined by the developer) and continue for five years thereafter.

Through each of these time periods, monitoring will be conducted at SW-U, SW-1, and SW-2. After the stormwater ponds are completed, monitoring will also include sample collection at SW-AB, SW-C, SW-D and SW-E. Monitoring events will be conducted three times during the wet season (July-September) and two times during the dry season (January-May). Sample collection during the wet and dry season will be triggered by rainfall according to the following:

- During the Baseline Monitoring period, sampling will be conducted following one-day rainfall events of approximately one-half inch or more at the project site (based upon on-site rain gauge data, as well as regional rainfall gauging stations and/or Doppler radar estimates available via the Internet).

- During the Construction Monitoring period prior to completion of the stormwater system outfalls, sampling will be conducted following one-day rainfall events of approximately one-half inch or more at the project site (based upon on-site rain gauge data, as well as regional rainfall gauging stations and/or Doppler radar estimates available via the Internet).

- During the Construction Monitoring period after completion of the stormwater system outfalls, sampling will be conducted following rainfall events of sufficient magnitude to cause discharge from one or more of the stormwater treatment system outfalls on the site. In the event the ponds do not discharge during a given wet season or dry season monitoring period, sampling will be conducted at all three stations on Cypress Creek one time during that period following a one-day rainfall event of approximately one-half inch or more at the project site (based upon on-site rain gauge data, as well as regional rainfall gauging stations and/or Doppler radar estimates available via the Internet).

- During the Post-Construction Monitoring period, sampling will be conducted following rainfall events of sufficient magnitude to cause discharge from one or more of the stormwater treatment system outfalls on the site. In the event the ponds do not discharge during a given wet season or dry season monitoring period, sampling will be conducted at all three stations on Cypress Creek one time during that period following a one-day rainfall event of approximately one-half inch or more at the project site (based upon on-site rain gauge data, as well as regional rainfall gauging stations and/or Doppler radar estimates available via the Internet).

For each monitoring event, every effort will be made to conduct sampling within 24-hours of the triggering rainfall event. If sampling cannot occur within 48-hours of the rainfall event, sampling will be postponed until the next rainfall event. Following completion of the stormwater treatment system, sampling will not be conducted if discharge is not present through at least one of the outfalls. To the extent possible, based upon the timing of rainfall, all regular monitoring events will be conducted at least two weeks apart.

4.0 PARAMETERS

The following parameters will be measured in the field at each active station:

temperature	conductivity	turbidity
pH	dissolved oxygen	

A single grab sample (comprised of several sub-sample vessels) will be collected from each active station. Samples will be preserved in the field and transported to the laboratory for analysis of the following constituents:

oil and grease	fecal coliform bacteria
total hardness	total suspended solids
ortho-phosphate	total phosphorus
nitrate+nitrite nitrogen	ammonia nitrogen
total Kjeldahl nitrogen	biochemical oxygen demand

arsenic	chromium VI	cadmium
copper	lead	zinc

chlorinated hydrocarbon pesticides (EPA Method 608)
chlorinated phenoxy acid herbicides (EPA Method 615)
organophosphate compounds, including Atrazine and Diazinon (EPA Method 8141A)
naphthalene and benzene – (EPA Method 8260)
polycyclic aromatic hydrocarbons – (EPA Method 8270sim)

This list of parameters will be monitored through the Baseline and Construction Monitoring periods, as well as at least one year of Post-Construction Monitoring. If, during the first full year of Post-Construction monitoring, one or more of the groups of organic compounds in the last set of parameters above is not detected above the levels observed during the Baseline Monitoring or applicable state water quality standards (whichever is lower), monitoring for those compounds will be reduced to once per year (during wet season sampling to target higher flows from the site). Such changes will be noted in water quality monitoring reports, as applicable.

5.0 FOLLOW-UP SAMPLING

Field and laboratory results will be evaluated as soon after each event as they are available. If results suggest a water quality concern that could be associated with the Cypress Creek Town Center development, follow-up sampling will be utilized to better characterize the condition. After the Baseline Monitoring period, if a regular monitoring event yields results that exceed levels observed in existing historical data [e.g., USGS data from its Station 02303420 on Cypress Creek, or Environmental Protection Commission of Hillsborough County (EPCHC) Station 120 on Cypress Creek], during Baseline Monitoring, or Class III water quality standards, a follow-up sampling event will be performed. The follow-up event will focus on the location where the initial concern was suggested, and on the parameters related to the observed concern. While follow-up sampling will not necessarily be performed in response to *de minimus* water quality changes, decisions to conduct follow-up sampling will be made conservatively to ensure that sampling identifies potential water quality problems as early as possible.

Follow-up sampling will be performed within one week of receipt of results showing the observed conditions of concern. This may mean that follow-up events are not directly linked to triggering rainfall events in the manner used during regular monitoring, and may not be conducted at times when discharge is present from all (or any) of the stormwater ponds. Follow-up sampling will be performed at the point(s) where the conditions of concern are observed. If at least one of the "on-site" stations on Cypress Creek (SW-1 and/or SW-2) showed a potential problem, all three Cypress Creek stations will be included in the follow-up sampling. The table below lists the parameters to be included in follow-up sampling, based on the observed water quality concern.

Elevated Level Observed for:	Follow-up Sampling Will Include:
Conductivity	All field parameters
Turbidity	All field parameters
pH	All field parameters
Dissolved Oxygen [<5.0 mg/L (*see below)]	All field parameters
Fecal coliform bacteria (*see below)	Fecal coliform bacteria, all field parameters
Oil and grease	Oil and grease, all field parameters
Total suspended solids	Total suspended solids, turbidity, all field parameters
Ortho or total phosphorus	All nitrogen and phosphorus species listed above, all field parameters
Any nitrogen species	All nitrogen and phosphorus species listed above, all field parameters
Biochemical oxygen demand	Biochemical oxygen demand and dissolved oxygen, all field parameters
Any heavy metal	All heavy metals listed above, total hardness, all field parameters
Any chlorinated hydrocarbon pesticide	All compounds in EPA Method 608, all field parameters
Any chlorinated phenoxy acid herbicide	All compounds in EPA Method 615, all field parameters
Any organophosphate compound	All compounds in EPA Method 8141A, all field parameters
Naphthalene or benzene	Naphthalene or benzene, all field parameters
Any polycyclic aromatic hydrocarbon	All compounds in EPA Method 8270sim, all field parameters

*--Follow-up sampling will generally not be performed in association with exceedences of Class III water quality standards for dissolved oxygen (DO) or fecal coliform sampling, since Cypress Creek is known to have episodes of depressed DO levels and elevated fecal coliform levels, and since the approved development activities cannot reasonably be expected to negatively affect these parameters. However, if measured DO levels are lower, or fecal coliform counts are higher, in the discharge from a pond than in synoptic data from the Cypress Creek stations, follow-up sampling will be implemented for those samples to evaluate whether the pond may be negatively influencing these parameters in Cypress Creek.

Follow-up sampling will not be conducted when the conditions of concern are only observed in samples from Cypress Creek and the levels of concern are the same (or worse) at the reference station (SW-U) as at Stations SW-1 and/or SW-2.

If follow-up sampling continues to show the same general conditions of concern, additional follow-up sampling will be performed in the same manner until the cause of the problem is identified and corrected or other mitigative steps are taken by the developer/site manager. Conversely, if follow-up sampling indicates no further indication of the potential pollution concern, no additional follow-up sampling will be conducted and the regular sampling schedule will be resumed.

If follow-up sampling is to be implemented, Pasco County will be notified in writing (and/or by electronic mail) within 48 hours of determination of the need for the sampling, and a courtesy copy of the notice will be provided to the Florida Department of Environmental Protection (FDEP) and Tampa Bay Water (TBW) (Note: TBW will only be notified if the parameter of concern is associated with potential human health issues). Such notices will include the reason follow-up sampling is being implemented, along with a schedule for the follow-up sampling effort.

6.0 QUALITY ASSURANCE

All field measurements and sample collection will be performed in accordance with FDEP Standard Operating Procedures as prescribed by Chapter 62-160, F.A.C. All laboratory analyses will be conducted by a state-certified laboratory with National Environmental Laboratories Accreditation Conference (NELAC) approval. Analyses will be conducted to conform to FDEP's Minimum Detection Limit (MDL) and Practical Quantitation Limit (PQL) targets (see link to current list at http://www.dep.state.fl.us/labs/library/index.htm).

7.0 REPORTING

Following the last wet season event each calendar year, and upon receipt of laboratory analysis results, a report will be prepared presenting the results of that year's monitoring. Annual reports will be submitted to Pasco County, and copied to FDEP, TBW, and EPCHC. Each annual report will include:

- A brief summary of the sampling methodology
- Meteorological conditions during the 48 hours preceding each sampling event
- Daily rainfall records for that year from a gauge in the general area (e.g., on-site rain gauge, local National Weather Service stations), or Doppler radar rainfall estimates
- Monitoring dates on which discharge was and was not present at each monitored outfall
- Description/discussion of anomalous field conditions, if encountered
- Photographs generally depicting sampling location conditions, if pertinent
- All field measurements and laboratory results
- Comparison of measured values with applicable state water quality standards
- Comparison of current values with those measured during prior monitoring (particularly baseline monitoring)

- Comparison with data reported by the USGS from its monitoring station 02303420 at SR54 (availability of data may lag the results generated by this monitoring program)
- Comparison with data reported by EPCHC from its Station 120 on Cypress Creek at County Road 581, and from any other station(s) established by EPCHC on Cypress Creek upstream of Station 120 (availability of data may lag the results generated by this monitoring program)
- Discussion of water quality conditions relative to the Cypress Creek Town Center development, where pertinent.
- Recommendations for any amendments or revisions to the monitoring plan, based upon results obtained or changes in site conditions.

If follow-up sampling is conducted, a separate report will be prepared addressing the regular sampling results leading to the follow-up sampling, the results of the follow-up sampling, and any mitigative steps proposed or undertaken by the developer/site manager. These reports will be submitted to Pasco County, with courtesy copies to FDEP, the Southwest Florida Water Management District (SWFWMD), and TBW (Note: TBW will only be notified if the parameter of concern is associated with human health concerns[1]). Such reports will be submitted within one week of the completion of all required analyses.

Results of any follow-up sampling efforts will also be included in the annual report for the current year, along with a brief discussion of steps taken to mitigate any adverse water quality issue that may have arisen in association with the Cypress Creek Town Center site (see below).

8.0 MEASURES TO PROTECT WATER QUALITY

If the regular monitoring and/or follow-up sampling results indicate that one or more of the stormwater outfalls is a likely source of a potential water quality concern, the developer/site manager will be advised immediately by the water quality monitoring contractor to take steps to remediate the conditions, including implementation or augmentation of additional stormwater best management practices and/or other feasible enhancements to the stormwater treatment system.

Within 30 days of notification by the water quality monitoring contractor of an apparent water quality problem, the developer/site manager will submit to Pasco County a plan outlining specific steps to be taken to ameliorate the situation. Courtesy copies of this plan will be provided to FDEP, SWFWMD and TBW (Note: TBW will only be notified if the parameter of concern is associated with potential human health issues).

Following implementation of any mitigative measures, a report will be submitted to Pasco County documenting the actions taken and the observed results. Courtesy copies of this report will be provided to FDEP, SWFWMD, and TBW (Note: TBW will only be notified if the parameter of concern is associated with potential human health issues).

[1] This generally includes the organic constituents and the heavy metals, when they are reported above the Maximum Contaminant Limit (MCL) as set forth in the US EPA Drinking Water Standards.

ATTACHMENT 5

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE

1. An eastern indigo snake protection/education plan shall be developed by the applicant or requestor for all construction personnel to follow. The plan shall be provided to the Service for review and approval at least 30 days prior to any clearing activities. The educational materials for the plan may consist of a combination of posters, videos, pamphlets, and lectures (*e.g.*, an observer trained to identify eastern indigo snakes could use the protection/education plan to instruct construction personnel before any clearing activities occur). Informational signs should be posted throughout the construction site and along any proposed access road to contain the following information:

    a. a description of the eastern indigo snake, its habits, and protection under Federal Law;
    b. instructions not to injure, harm, harass or kill this species;
    c. directions to cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site on its own before resuming clearing; and,
    d. telephone numbers of pertinent agencies to be contacted if a dead eastern indigo snake is encountered. The dead specimen should be thoroughly soaked in water and then frozen.

2. If not currently authorized through an Incidental Take Statement in association with a Biological Opinion, only individuals who have been either authorized by a section 10(a)(1)(A) permit issued by the Service, or by the State of Florida through the Florida Fish Wildlife Conservation Commission (FWC) for such activities, are permitted to come in contact with an eastern indigo snake.

3. An eastern indigo snake monitoring report must be submitted to the appropriate Florida Field Office within 60 days of the conclusion of clearing phases. The report should be submitted whether or not eastern indigo snakes are observed. The report should contain the following information:

    a. any sightings of eastern indigo snakes and
    b. other obligations required by the Florida Fish and Wildlife Conservation Commission, as stipulated in the permit.

Revised February 12, 2004

ATTACHMENT 6

AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER FORM

AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER

Submit this form and one set of as-built engineering drawings to the U.S. Army Corps of Engineers, Enforcement Branch, Post Office Box 4970, Jacksonville, Florida 32232-0019. If you have questions regarding this requirement, please contact the Enforcement Branch at 904-232-2907.

1. Department of the Army Permit Number: _____

2. Permittee Information:

   Name _____

   Address _____

_____

3. Project Site Identification:

Physical location/address _____

_____

4. As-Built Certification:

I hereby certify that the authorized work, including any mitigation required by Special Conditions to the permit, has been accomplished in accordance with the Department of the Army permit with any deviations noted below. This determination is based upon on-site observation, scheduled and conducted by me or by a project representative under my direct supervision. I have enclosed one set of as-built engineering drawings.

_____ _____

Signature of Engineer Name (Please type)

_____ _____

(FL, PR or VI) Reg. Number Company Name

_____

Address

_____

City State ZIP

(Affix Seal)

_____ _____

Date Telephone Number

Deviations from the approved permit drawings and special conditions: (attach additional pages if necessary)

ATTACHMENT 7

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST FORM

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: _____

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Branch, Post Office Box 4970, Jacksonville, FL 32232-0019.

_____ _____

(TRANSFEREE-SIGNATURE) **(SUBDIVISION)**

_____ _____ _____

(DATE) **(LOT)** **(BLOCK)**

_____ _____

(NAME-PRINTED) **(STREET ADDRESS)**

_____

_____

(MAILING ADDRESS)

_____

(CITY, STATE, ZIP CODE)